Idaho Department of Education Public Schools Agenda

STATE BOARD OF EDUCATION

June 26-27, 2003

University of Idaho, Moscow

- A. Request for Rule Waiver, Carpenter Bus Manufacturing, Rod McKnight
- B. Safety Busing Requests, Rod McKnight
- C. Request for Negotiated Rulemaking, Rod McKnight
- D. Trustee Rezones, Council District, Bob West
- E. PSC Appointment Nominations, Marilyn Howard
- F. Superintendent's Report, Marilyn Howard

A. SUBJECT:

Rule Waiver - Carpenter School Bus Depreciation Reimbursement

BACKGROUND:

On April 14, 2003, the School Bus Information Council (SBIC) issued an urgent safety advisory to all states to examine immediately Carpenter school buses in their fleets manufactured between 1986 and 1995 to determine if structural weld failures exist in the roof structure.

In compliance to Idaho Code and administrative rules, the Department of Education issued a notice to all Idaho school districts to expeditiously remove from service all school buses affected by the national advisory until such time as a "certifiable" fix can be determined.

DISCUSSION:

Administrative rule invokes specific depreciation reimbursement sanctions whenever a bus is prematurely sold, traded or for any other reason becomes inoperable (Standards for Idaho School Buses and Operations - SISBO, pages 73-76).

RECOMMENDATION:

The State Department of Education seeks approval to waive depreciation reimbursement sanctions in situations related to school districts removing from service any Carpenter Manufacturing school bus affected by the April 14, 2003, SBIC national advisory.

BOARD ACTION:

It	was	moved	by								sec	onded	by
								,	and	carrie	l to	appro	ove/
dis	sappro	ve/table	a wa	aiver	of ad	lminist	rativ	e rul	es app	olicable	to de	precia	tion
rei	mbur	sement s	ancti	ons r	elated	l to the	e rem	ovin	g fron	n servic	e any	Carpe	nter
M	anufac	cturing s	choo	l bus	affec	eted by	y the	SBI	C nat	ional ac	visor	y of A	pril
14	,2003	3.											

ATTACHMENTS:

- 1. Memorandum, May 7, 2003
- 2. Standards for Idaho School Buses and Operations, SISBO, pages 73-76 (applicable parts)

MEMORANDUM

To: School District Superintendents

Transportation Supervisors

Idaho State Police

From: State Department of Education, Pupil Transportation Section

Date: May 7, 2003

Subject: 1986-1995 Carpenter Manufacturing School Buses

Based on a Florida school bus crash and subsequent examination by several other states of similar school buses, the School Bus Information Council (SBIC) issued an urgent safety advisory (April 14, 2003) to all states to examine immediately Carpenter school buses in their fleets manufactured between 1986 and 1995 to determine if structural weld failures exist in the roof structure.

The Florida crash involved a 1991 Type "D" Carpenter school bus that rolled over, causing the roof to collapse down to the seat level (www.schoolbusinfo.org). Federal Motor Vehicle Safety Standard No. 220, "School Bus Rollover Protection," requires school buses to have roof strength capable of supporting 1 ½ times the weight of the bus. The nature of the Florida crash, and discovery of failed welds, suggests that the bus would not have complied with Federal Safety Standard No. 220. The obvious implication for states and school districts is that they may be unknowingly operating buses that are not in compliance.

Normally, if a safety defect is determined, the National Highway Safety Administration will require the manufacturer to conduct a recall to remedy the situation at no cost to the owner. However, Carpenter Manufacturing is no longer in business and a fix has not been clearly approved or certified by anyone willing to accept liability. Therefore, resolution options for this safety defect are limited.

Idaho Codes 33-1506, 49-235 and 49-902, administrative rules IDAPA 08.02.02.160.01-04, Standards for Idaho School Buses and Operations, pages 2-3, 61, 65, and 72-76, and School Bus Withdrawal from Service Standards, page 6, require Idaho school buses to be maintained in a safe operating condition at all times and also require the withdrawal from service any bus found to be deficient or in any way unsafe.

The School Bus Information Council is currently promising a forthcoming fix and is providing provisional guidance; nevertheless, the Idaho State Department of Education is requiring that all Idaho school districts expeditiously remove from service all school buses affected by

Carpenter Manufacturing School Bus Non-Compliance May 7, 2003 Page 4

this national advisory unless, or until such time as a "certifiable" fix becomes unmistakably clear.

Because the State Department of Education Pupil Transportation Section takes school bus safety very seriously and because it is not the intent of SDE to force students into less safe modes of transportation, it will seek State Board of Education approval to continue depreciation reimbursement to any school district that responds appropriately and expeditiously to replace Carpenter school buses at risk to roof structural failure.

SDE will also evaluate favorably, for purposes of reimbursement, requests for short-term leases. School districts might also consider lease-purchase options while interest rates are extremely favorable. Additionally, if the local board determines that an emergency exists for the replacement of these specific school buses, statute (33-601(9), Idaho Code) could provide a mechanism for immediate bus purchasing authority.

Another option could be finding a reputable firm to "certify" compliance to FMVSS No. 220 on any school bus at risk. Also, affected school districts could request assistance from neighboring districts and contractors by requesting routing assistance or by borrowing or purchasing buses that might be available. All school districts and contractors are encouraged to assist in eliminating this safety risk to Idaho students.

SDE encourages local school districts to consider all the available facts related to this national advisory, evaluate the above alternatives and incentives and respond appropriately. SDE will participate, as a partner in pupil transportation safety, in any dialog targeting resolution of this very serious matter and will welcome school district input and feedback. However, student safety must be paramount in the resolution process.

The following crash site pictures were obtained from the School Bus Information Council website www.schoolbusinfo.org.



Bus on roof at crash site



Side view at crash site (right side)

Standards

In order to be eligible for depreciation and operation costs a school bus must meet all federal and Idaho minimum construction standards and State Board of Education standards. (SISBO, page 73)

Retrofit Standards

Any vehicle that has been retrofitted to be used as a school bus will meet current Idaho minimum construction standards.

Any school bus that undergoes a partial retrofit will meet current Idaho minimum construction standards applicable to the retrofitted part(s). (SISBO, page 73)

Inoperable Bus

Any school bus that is wrecked, sold, inoperable, or for any other reason does not or cannot meet all federal, state and State Board of Education construction and operational standards will be removed from the depreciation schedule. Revenues received subsequent to an insurance claim, associated with any district owned vehicle that receives state pupil transportation reimbursement consideration, shall be reported on the pupil transportation reimbursement claim form. (SISBO, page 75-76)

Depreciation Account

All school bus depreciation revenue received by school districts from the state will be placed into a separate account and used only for the purchase of school buses. Any revenue received by the school district subsequent to the sale of any used school bus will be placed into a separate account and used only for the purchase of school buses. Trade-in values reflected in district bid specifications and subsequent invoicing will not be subtracted from the purchase price of the new bus for purposes of depreciation reimbursement. (SISBO, page 76)

B. SUBJECT:

Safety Busing - Approval to Reimburse Costs for Transporting Students Less than One and One-half Miles

BACKGROUND:

Idaho Code 33-1006 states, "The transportation support program of a school district shall be based upon the allowable costs of. . . transporting pupils less than one and one-half $(1\frac{1}{2})$ miles as provided in section 33-1501, Idaho Code, when approved by the State Board of Education."

Standards for Idaho School Buses and Operations states, "All school districts submitting applications for new safety busing reimbursement approval shall establish a board policy for evaluating and rating all safety busing requests . . . which shall include an element for validating contacts with responsible organizations or persons responsible for improving or minimizing hazardous conditions. Each applying district will be required to annually affirm that conditions of all prior approved safety busing requests are unchanged . . . School districts that receive state reimbursement of costs associated with safety busing will re-evaluate all safety busing sites at intervals of at least every three years using the local board adopted measuring or scoring instrument . . . Consideration for reimbursement will be contingent on the application for new safety busing being received by the State Department of Education Transportation Section on or before March 31 of the school year in which the safety busing began."

DISCUSSION:

Requests from various school districts to transport students less than one and one-half miles, as provided in Section 33-1006, Idaho Code, have been received by the State Department of Education and are being submitted to the State Board of Education for reimbursement consideration. Existing safety busing situations and all new safety busing requests included results obtained from the new SDE measuring and rating instrument. Approximately 28,905 students will be affected by this board action. Five school districts are requesting reimbursement consideration for new safety busing sites; Meridian – 176 students, Nampa – 455 students, Potlatch – 3 students, New Plymouth – 6 students, and American Falls – 157 students.

Thirty-seven school districts reported an increase in the number of safety-bused students; 34 school districts reported a decrease; 26 school districts reported no change. The requests submitted represent an overall statewide increase of 1,928 safety-bused students. For FY2003, the overall safety-busing cost represents approximately \$995,000. This includes an increase of approximately \$120,000 (using SDE's current methodology for calculating safety busing costs).

RECOMMENDATION:

Ninety-seven school districts are applying for safety busing reimbursement consideration. The State Department of Education requests approval of all safety busing reimbursement requests.

BOARD ACTION:

It	was	carried	to	approve/o	disapprove/tabl	e safety	busing	reimbursemen
rec	quests	s for fisc	al y	ear 2003.	Moved by			
se	conde	ed by				nd carrie	ed.	

ATTACHMENTS:

1. Safety busing reimbursement requests

SAFETY BUSING REIMBURSEMENT REQUESTS

The following is a list of previously approved and new requests from school districts to transport safety-busing students less than one and one-half miles to and from school. All requests were received on or before March 31, approved by the local board of trustees, and reviewed by SDE pupil transportation staff. The safety-busing students in the respective districts were transported during fiscal year 2003.

- 1. Boise School District transported 1,634 safety-busing students attending grades K through 9
- 2. Meridian School District transported 1,761 safety-busing students attending grades K through 12 Includes 176 students in new areas
- 3. Kuna School District transported 569 safety-busing students attending grades K through 12
- 4. Marsh Valley School District transported 115 safety-busing students attending grades K through 12
- 5. Pocatello School District transported 1,125 safety-busing students attending grades K through 12
- 6. Bear Lake School District transported 105 safety-busing students attending grades K through 12
- 7. St Maries School District transported 116 safety-busing students attending grades Preschool through 8
- 8. Plummer/Worley School District transported 99 safety-busing students attending grades K through 8
- 9. Snake River School District transported 250 safety-busing students attending grades K through 12
- 10. Blackfoot School District transported 404 safety-busing students attending grades K through 12
- 11. Aberdeen School District transported 100 safety-busing students attending grades K through 12
- 12. Firth School District transported 156 safety-busing students attending grades K through 12
- 13. Shelley School District transported 192 safety-busing students attending grades K through 12
- 14. Blaine County School District transported 405 safety-busing students attending grades K through 12
- 15. Garden Valley School District transported 37 safety-busing students attending grades K through 12
- 16. Basin School District 16 safety-busing students attending grades K through 12
- 17. Horseshoe Bend School District transported 310 safety-busing students attending grades K through 12
- 18. West Bonner County School District transported 66 safety-busing students attending grades K through 6

- 19. Lake Pend Oreille School District transported 124 safety-busing students attending grades K through 6
- 20. Idaho Falls School District transported 871 safety-busing students attending grades K through 12
- 21. Swan Valley School District transported 10 safety-busing students attending grades K through 6
- 22. Bonneville School District transported 1,291 safety-busing students attending grades K through 12
- 23. Boundary Co School District transported 45 safety-busing students attending grades Preschool through 12
- 24. Butte County School District transported 61 safety-busing students attending grades K through 8
- 25. Nampa School District transported 2,075 safety-busing students attending grades K through 8 **Includes 455 students in new areas**
- 26. Caldwell School District transported 2,690 safety-busing students attending grades K through 12
- 27. Wilder School District transported 130 safety-busing students attending grades K through 6
- 28. Middleton School District transported 319 safety-busing students attending grades K through 8
- 29. Notus School District transported 92 safety-busing students attending grades K through 12
- 30. Melba School District transported 40 safety-busing students attending grades K through 11
- 31. Parma School District transported 60 safety-busing students attending grades K through 5
- 32. Vallivue School District transported 219 safety-busing students attending grades Preschool through 12
- 33. Grace School District transported 19 safety-busing students attending grades K through 12
- 34. North Gem School District transported 11 safety-busing students attending grades K through 12
- 35. Soda Springs School District transported 200 safety-busing students attending grades K through 12
- 36. Cassia County School District transported 515 safety-busing students attending grades K through 12
- 37. Clark Co School District transported 89 safety-busing students attending grades K through 12
- 38. Orofino School District transported 102 safety-busing students attending grades K through 9
- 39. Challis School District transported 43 safety-busing students attending grades K through 12
- 40. Mackay School District transported 70 safety-busing students attending grades Preschool through 12
- 41. Glenns Ferry School District transported 188 safety-busing students attending grades K through 12
- 42. Mountain Home School District transported 470 safety-busing students attending grades

- K through 12
- 43. Preston School District transported 600 safety-busing students attending grades K through 8
- 44. West Side School District transported 102 safety-busing students attending grades K through 12
- 45. Fremont County School District transported 210 safety-busing students attending grades K through 12
- 46. Emmett School District transported 453 safety-busing students attending grades K through 8
- 47. Gooding School District transported 250 safety-busing students attending grades Preschool through 12
- 48. Wendell School District transported 17 safety-busing students attending grades K through 12
- 49. Hagerman School District transported 63 safety-busing students attending grades K through 12
- 50. Bliss School District transported 47 safety-busing students attending grades K through 12
- 51. Grangeville School District transported 159 safety-busing students attending grades K through 12
- 52. Cottonwood School District transported 69 safety-busing students attending grades K through 12
- 53. Jefferson County School District transported 419 safety-busing students attending grades K through 12
- 54. Ririe School District transported 692 safety-busing students attending grades K through 12
- 55. West Jefferson School District transported 65 safety-busing students attending grades Pre-school through 12
- 56. Jerome School District transported 115 safety-busing students attending grades K through 6
- 57. Valley School District transported 4 safety-busing students attending grades K through 6
- 58. Coeur d'Alene School District transported 392 safety-busing students attending grades K through 12
- 59. Lakeland School District transported 130 safety-busing students attending grades K through 12
- 60. Post Falls School District transported 1071 safety-busing students attending grades K through 12
- 61. Kootenai School District transported 15 safety-busing students attending grades K through 12
- 62. Moscow School District transported 300 safety-busing students attending grades K through 12
- 63. Genesee School District transported 48 safety-busing students attending grades K through 12
- 64. Potlatch School District transported 50 safety-busing students attending grades K through 12 Includes 3 students in new areas

- 65. Salmon School District transported 125 safety-busing students attending grades K through 12
- 66. South Lemhi School District transported 8 safety-busing students attending grades K through 12
- 67. Kamiah School District transported 90 safety-busing students attending grades K through 12
- 68. Highland School District transported 2 safety-busing students attending grades 3 and 6
- 69. Shoshone School District transported 92 safety-busing students attending grades K through 12
- 70. Dietrich School District transported 6 safety-busing students attending grades K through 6
- 71. Madison School District transported 860 safety-busing students attending grades K through 7
- 72. Sugar-Salem School District transported 94 safety-busing students attending grades K through 12
- 73. Minidoka County School District transported 882 safety-busing students attending grades K through 12
- 74. Lapwai School District transported 23 safety-busing students attending grades K through 12
- 75. Culdesac School District transported 13 safety-busing students attending grades K through 12
- 76. Oneida Co School District transported 12 safety-busing students attending grades K through 12
- 77. Marsing School District transported 70 safety-busing students attending grades K through 7
- 78. Homedale School District transported 210 safety-busing students attending grades K through 12
- 79. Payette School District transported 681 safety-busing students attending grades K through 12
- 80. New Plymouth School District transported 69 safety-busing students attending grades K through 8 Includes 6 students in new areas
- 81. Fruitland School District transported 145 safety-busing students attending grades K through 12
- 82. American Falls School District transported 256 safety-busing students attending grades K through 12 Includes 157 students in new areas
- 83. Arbon School District transported 6 safety-busing students attending grades K through 12
- 84. Kellogg School District transported 85 safety-busing students attending grades K through 8
- 85. Wallace School District transported 20 safety-busing students attending grades K through 5
- 86. Avery School District transported 8 safety-busing students attending grades K through 8
- 87. Teton School District transported 62 safety-busing students attending grades K through 5
- 88. Twin Falls School District transported 1,114 safety-busing students attending grades K through 12

- 89. Buhl School District transported 454 safety-busing students attending grades K through 12.
- 90. Filer School District transported 153 safety-busing students attending grades K through 12
- 91. Kimberly School District transported 50 safety-busing students attending grades Preschool through 12
- 92. Hansen School District transported 100 safety-busing students attending grades K through 12
- 93. Castleford School District transported 28 safety-busing students attending grades K through 12
- 94. McCall-Donnelly School District transported 231 safety-busing students attending grades K through 12
- 95. Cascade School District transported 7 safety-busing students attending grades K through
- 96. Weiser School District transported 480 safety-busing students attending grades K through 12
- 97. Cambridge School District transported 4 safety-busing students attending grades K through 12

C. SUBJECT:

Notice of Rulemaking – Proposed Rule

BACKGROUND:

The Board approved a "Notice of Negotiated Rulemaking" at its March meeting. The notice was published in the May administrative bulletin, which articulated anticipated changes in administrative rule and provided notice of a public hearing.

A memorandum was distributed to superintendents and transportation supervisors regarding the rulemaking process, including rule language changes, at regional superintendent meetings.

DISCUSSION:

Subsequent to State Board of Education meetings in August, October and March of fiscal year 2003, legislative and OPE inquiries, concerns and suggestions have amplified. Additionally, House Bills 463 and 467 promise to impact the pupil transportation support program. Consequently, the State Department of Education Pupil Transportation Section anticipates an increasing need for changes in current administrative rule and administrative rule by reference related to the pupil transportation support program.

The *Standards for Idaho School Buses and Operations – October 2, 2003*, a rule by reference document, has been drafted as part of the Administrative Procedures Act process. Language in the draft document may change secondary to input during the proposed rule process. Final approval of the document will be requested in October, during the pending rule phase.

RECOMMENDATION:

The State Department of Education seeks approval to prepare a Notice of Proposed Rulemaking for publication in the August Administrative Bulletin.

BOARD ACTION:

It w	as carried to	appi	rove/	disapprov	ve/table a Notice	of Proposed	i Rulemak	ang			
for	publication	in	the	August	Administrative	Bulletin.	Moved	by			
					,	seconded					
		, and carried.									

ATTACHMENTS:

- 1. Notice of Intent to Promulgate Rules (Proposed Rulemaking)
- 2. Summary of changes in Standards for Idaho School Buses and Operations (SISBO)
- 3. IDAPA 08.02.02.150-190 (legislative format)
- 4. Standards for Idaho School Buses and Operations (changes in legislative format) available for previewing at http://www.sde.state.id.us/finance/transport/docs/regs/standardsidahoschoolbusesoperationsrev.pdf

IDAPA 08-IDAHO STATE BOARD OF EDUCATION

08.02.02 - RULES GOVERNING UNIFORMITY

DOCKET NO. 08-0202-0301

NOTICE OF RULEMAKING - PROPOSED RULEMAKING

AUTHORITY: In compliance with Section 67-5220(1), Idaho Code, notice is hereby given that this agency has proposed rulemaking. The action is authorized pursuant to Sections 33-1501 through 33-1512 and 33-1006, Idaho Code.

PUBLIC HEARING SCHEDULE: A public hearing on this rulemaking will be held as follows:

August 27, 2003, 9:00-11:00 a.m. - Idaho State Department of Education, LBJ Building - 2nd floor Conference Room - 650 State St., Boise, ID 83720-0027. The meeting site will be accessible to persons with disabilities. Requests for accommodation must be made not later than five (5) days prior to the meeting. For arrangements, contact the undersigned at (208) 332-6811.

DESCRIPTIVE SUMMARY: The following is a statement in nontechnical language of the substance and purpose of the intended rulemaking and the principle issues involved:

Current administrative rules related to Idaho's pupil transportation support program became effective July 1, 2002. Changes in administrative rule and Standards for Idaho School Buses and Operations related to new school bus construction standards, operations and bus purchasing are anticipated in response to a national advisory, legislative inquiries, legislation and concerns expressed by the State Board of Education.

NEGOTIATED RULEMAKING: Pursuant to IDAPA 04.11.01.811, negotiated rulemaking was conducted. The Notice of Negotiated Rulemaking was published in the May 2003 Idaho Administrative Bulletin, Volume 03-5, Page 12. Following SBE approval of the negotiated rulemaking process, SDE disseminated information to superintendents, transportation supervisors, contractors and technicians throughout the state. Staff members from the State Department of Education presented suggested language at regional superintendents' meetings and the Idaho Pupil Transportation Summer Conference. A public hearing was held on May 28, 2003. Following input from various stakeholders, the **Standards for Idaho School Buses and Operations – October 2, 2003** document has been drafted as part of the Administrative Procedures Act process. A SISBO draft, as well as a proposed rule draft, can be accessed at http://www.sde.state.id.us/finance/transport/regulations.htm; "Notice of Negotiated/Proposed Rulemaking."

ASSISTANCE ON TECHNICAL QUESTIONS, SUBMISSION OF WRITTEN COMMENTS, OBTAINING COPIES: For assistance on technical questions concerning this rulemaking or to obtain a copy of the draft of the text of the proposed rule, contact Rodney D. McKnight, State Department of Education, Finance and Transportation, P.O. Box 83720, Boise, Idaho, (208) 332-6851 or fax to (208) 334-3484.

Anyone may submit written comments regarding this proposed rulemaking. All written comments must be directed to the undersigned and must be delivered on or before August 28, 2003.

DATED this 26th day of June, 2003

Dr. Marilyn Howard, Superintendent of Public Instruction State Department of Education 650 West State Street - P.O. Box 83720 Boise, Idaho 83720-0027 (208) 332-6811 - (208) 332-6836 fax



P.O. Box 83720 BOISE IDAHO 83720-0027

DR. MARILYN HOWARD STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

Memorandum

To: State Board of Education

From: Rodney D. McKnight, Supervisor, Transportation Services

Date: June 26, 2003

Re: Notice of Negotiated/Proposed Rulemaking – Summary of Changes

The State Department of Education received approval to proceed with a Notice of "Negotiated" Rulemaking from the State Board of Education on March 6, 2003. The notice was published in May's Administrative Bulletin.

A public hearing was held May 28, 2003, 12:00 p.m. to 5:00 p.m. at the Idaho State Department of Education, LBJ Building, 2nd floor Conference Room, 650 State St., Boise, ID 83720-0027.

Current administrative rules related to Idaho's pupil transportation support program became effective July 1, 2002. Changes in administrative rule and Standards for Idaho School Buses and Operations related to new school bus construction standards, operations and bus purchasing are anticipated in response to a national advisory, legislative inquiries, legislation and concerns expressed by the State Board of Education.

A summary of proposed changes include:

- 1. Sixty-day school bus inspection clarification language (IDAPA 08.02.02.160; 33-1506, Idaho Code)
- 2. Withdraw From Service Authority (IDAPA 08.02.02.160)
- 3. SISBO, cover page
- 4. SISBO, State Board of Education approval date changed from November 15, 2001 to June 26, 2003
- 5. SISBO, page 3 and page 27, removes requirement for heater bleeder and heather valve PDI locations
- 6. SISBO, page 3, allows alternate media for parts and service manuals
- 7. SISBO, page 7, allows vehicle component interlocking to vehicle parking brake systems with appropriate integrated safeguard
- 8. SISBO, page 7, exempts Type A and B buses from specific brake warning systems
- 9. SISBO, page 7, removes brake application gauge requirement
- 10. SISBO, page 9, adds language clarifying acceptance of "non-reflective" National School Bus Yellow hood

- 11. SISBO, page 9 and page 18, exempts Type A and B buses from body battery box requirement
- 12. SISBO, page 18, changes battery shut-off switch accessibility requirement
- 13. SISBO, page 20 and page 28, removes reimbursement for "white roof option
- 14. SISBO, page 26, removes reimbursement for auxiliary fuel fired heating systems
- 15. SISBO, page 28 and page 41 and page 45, removes reimbursement for glass tenting
- 16. SISBO, page 29, clarifies supplier of "unauthorized-entry" placard
- 17. SISBO, page 76, removes reimbursement language for computerized routing software

DRAFT - 06/26/03

IDAPA 08 TITLE 02 Chapter 02

08.02.02 - RULES GOVERNING UNIFORMITY A DRAFT - Anticipated Proposed Rule Changes - A DRAFT Language Deleted - Language Added

004. INCORPORATION BY REFERENCE.

05. Incorporated Document. The Standards for Idaho School Buses and Operations as approved on November 15, 2001 October 2, 2003.

150. TRANSPORTATION.

Minimum School Bus Construction Standards. All new school bus chassis and bodies must meet or exceed Standards for Idaho School Buses and Operations as approved on November 15, 2001 October 2, 2003, as authorized in Section 33-1511, Idaho Code.

151. -- 159. (RESERVED).

160. MAINTENANCE STANDARDS AND INSPECTIONS.

- **01. Safety**. School buses will be maintained in a safe operating condition at all times. Certain equipment or parts of a school bus that are critical to its safe operation must be maintained at prescribed standards. When routine maintenance checks reveal any unsafe condition identified in the Standards for Idaho School Buses and Operation as approved on November 15, 2001 October 2, 2003, the school district will eliminate the deficiency before returning the vehicle to service.
- **Q2. Annual Inspection.** After completion of the annual school bus inspection, and if the school bus is approved for operation, an annual inspection sticker, indicating the year and month of inspection, will be placed in the lower, right-hand corner of the right side front windshield. The date indicated on the inspection sticker shall correlate to State Department of Education's annual school bus inspection certification report signed by pupil transportation maintenance personnel and countersigned by the district superintendent. (Section 33-1506, Idaho Code)
- **O3.** Sixty-Day Inspections. At intervals of not more than sixty (60) calendar days, excluding documented out-of-use periods in excess of thirty (30) days, the board of trustees shall cause inspection to be made of each school bus operating under the authority of the board. Except that, no bus with a documented out-of-use period in excess of sixty (60) days shall be returned to service without first completing a documented sixty (60) day inspection. Annual inspections are considered dual purpose and also meet the sixty (60) day inspection requirement. (Section 33-1506, Idaho Code)
- **9304. Documentation Of Inspection**. All inspections will be documented in writing. Annual inspections must be documented in writing on the form provided by the State Department of Education.
- **0405. Unsafe Vehicle**. When a bus has been removed from service during a State Department of Education inspection due to an unsafe condition, the district will notify the State Department of Education on the appropriate form before the bus can be returned to service. When a bus has been found to have deficiencies that are not life-threatening, it will be repaired within thirty (30) days and the State Department of Education notified on the appropriate form. If the deficiencies cannot be repaired within thirty (30) days, the bus must be removed from service until the deficiencies have been corrected or an extension granted. (Section 33-1506, Idaho Code)
- <u>06.</u> Withdraw From Service Authority. Subsequent to any federal, national, or state advisory with good cause given therefor, the district shall, under the direction of the State Department of Education, withdraw from service any bus determined to be deficient in any prescribed school bus construction standard intended to safeguard life or minimize injury. No bus withdrawn from service under

DRAFT - 06/26/03

the provisions of this section shall be returned to service or used to transport students unless the district submits to the State Department of Education a certification of compliance specific to the school bus construction standard in question. (Section 33-1506, Idaho Code)

161. -- 169. (RESERVED).

170. SCHOOL BUS DRIVERS AND VEHICLE OPERATION.

All school districts and school bus drivers must meet or exceed the training, performance and operation requirements delineated in the Standards for Idaho School Buses and Operations as approved on November 15, 2001 October 2, 2003. (Section 33-1508; 33-1509, Idaho Code)

171. -- 179. (RESERVED).

180. WRITTEN POLICY.

The board of trustees will establish and adopt a set of written policies governing the pupil transportation system. Each school district that provides activity bus transportation for pupils shall have comprehensive policies and guidelines regarding activity transportation.

181. -- 189. (RESERVED).

190. PROGRAM OPERATIONS.

School district fiscal reporting requirements as well as reimbursable and non-reimbursable costs within the Pupil Transportation Support Program, including but not limited to administration, field and activity trips, safety busing, contracting for transportation services, leasing of district-owned buses, insurance, ineligible and non-public school students, ineligible vehicles, capital investments including the purchasing of school buses and equipment, and commercial computerized routing and scheduling software shall be delineated in Standards for Idaho School Buses and Operations as approved on November 15, 2001 October 2, 2003. (Section 33-1006, Idaho Code)

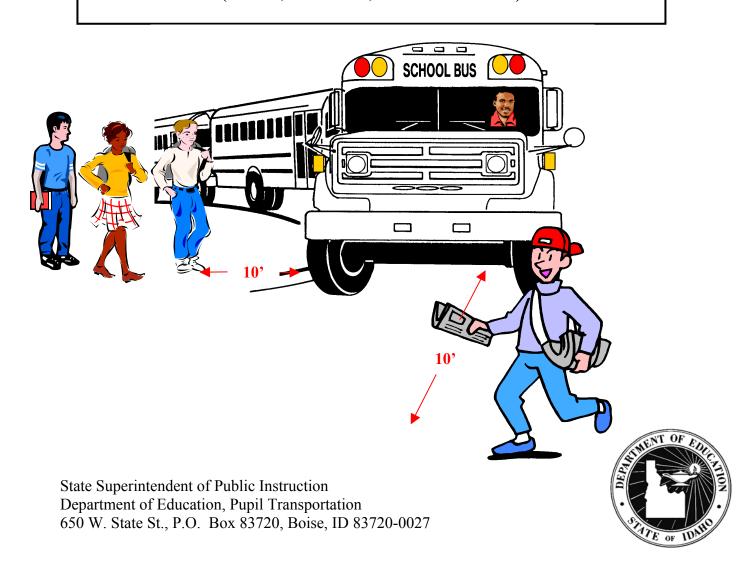
191. -- 219. (RESERVED).

STANDARDS FOR IDAHO SCHOOL BUSES AND OPERATIONS

November 15, 2001 October 2, 2003

RULE BY REFERENCE

(33-1511, Idaho Code; IDAPA 08.02.02.150)



SCHOOL BUS CONSTRUCTION STANDARDS

This edition of *Standards for Idaho School Buses and Operations* – *November 15, 2001 October* 2, 2003, is based on the latest report from the Thirteenth National Conference on School Transportation, Warrensburg, Missouri, May 2000 (*National School Transportation Specifications & Procedures*). (33-1511, Idaho Code)

This portion of *Standards for Idaho School Buses and Operations* – *November 15, 2001 October 2, 2003*, is divided into five sections: Chassis Standards, Body Standards, Standards for Specially Equipped School Buses, Standards for Alternative Fuel for School Buses and Removal from Service Criteria. There are two basic reasons for this format: (1) to define minimum chassis and body standards, and (2) to assign responsibility for providing specific equipment. Items delineated in the chassis standards are to be provided by the chassis manufacturer. Items delineated in the Specially Equipped School Bus Section are to be provided by the body manufacturer and most of the requirements for Standards for Alternative Fuel for School Buses are the responsibility of the chassis manufacturer. Therefore, whenever a school district purchases these types of vehicles, special attention must be given to both the chassis specifications and the body specification as they relate to the specific manufacturers.

For new vehicles, it is the responsibility of the vehicle manufacturers to certify compliance with applicable federal standards by installing a certification plate in the driver's area on each vehicle. However, as the vehicle is maintained over its useful life, it is the responsibility of those who supervise and perform work on the vehicle to assure on-going compliance with all applicable standards. When routine maintenance checks reveal any unsafe condition as defined in these standards, the school district will remove the vehicle from service and will eliminate the deficiency before returning the vehicle to service. For this reason, maintenance personnel training, quality components, quality workmanship and thorough maintenance records are essential.

STATUTORY AUTHORITY

The State Board of Education shall adopt, publish and distribute and from time to time as need therefor arises amend, minimum standards for the construction of school buses, the basis of which standards shall be those incorporated in the latest report of the National Conference on School Transportation, which report shall be filed with the Department of Law Enforcement. (33-1511, Idaho Code)

All school buses shall at all times conform to the standards of construction prescribed therefor by the state board of education. Before any newly acquired school bus is used for transporting pupils it shall be inspected by a duly authorized representative of the state department of education, and if, upon inspection, it conforms to prescribed standards of construction, or such other standards prescribed by law or regulation, it may be used for transporting pupils; otherwise, no such school bus shall be used for that purpose. The board of trustees of each school district shall provide for an annual inspection of all school buses by district personnel or upon contract at

intervals of not more than twelve (12) months. The district, over the signature of the superintendent, shall file with the state department of education its report of inspection of the school buses operated by the authority of the school district. At intervals of not more than sixty (60) days during each school year the board of trustees shall cause inspection to be made of all school buses operating under the authority of the board. In addition, the state department of education shall conduct random, spot inspections of school buses throughout the school year. Whenever any school bus is found, upon inspection, to be deficient in any of the prescribed standards, or is found in any way to be unsafe or unfit for the transportation of pupils, such vehicle shall be withdrawn from service and shall not be returned to service until the district certifies the necessary repairs have been made. (33-1506, Idaho Code)

Administrative Rules of the State Board of Education: IDAPA 08.02.02.150 and IDAPA 08.02.02.160.

RESPONSIBILITIES OF SUPPLIERS

Delivery Requirements: The school bus manufacturer shall provide the following materials to the purchaser of a new school bus at the time the unit is delivered to the purchasing school district or contractor. Also, the new school bus dealer, school district or contractor shall temporarily provide the following materials to the state school bus inspector at the time the unit undergoes its new school bus state inspection.

- 1. Line set tickets for each bus built as a complete unit, and a separate set of line set tickets for buses manufactured in two pieces.
- 2. A copy of a completed pre-delivery inspection (PDI) form for each individual unit. The heater shut-off valve and bleeder locations shall be listed on the PDI form.
- 3. Warranty book and statement of warranty for each individual unit. All warranties shall commence on the day that the purchaser accepts possession of the completed bus.
- 4. Service manual (or related resource) for each individual unit or group of identical units.
- 5. Parts manual (or related resource) for each individual unit or group of identical units.

DEFINITIONS

National School Transportation Specifications & Procedures – School Bus Types

Type A

A Type "A" school bus is a van conversion or bus constructed utilizing a cutaway front-section vehicle with a left side driver's door. The entrance door is behind the front wheels. This definition includes two classifications: Type A1, with a Gross Vehicle Weight Rating (GVWR) less than or equal to 10,000 pounds; and Type A2, with a GVWR greater than 10,000 pounds.

Type B

A Type "B" school bus is constructed utilizing a stripped chassis. The entrance door is behind the front wheels. This definition includes two classifications; Type B1, with a GVWR less than or equal to 10,000 pounds; and Type B2, with a GVWR greater than 10,000 pounds.

Type C

A Type "C" school bus is constructed utilizing a chassis with a hood and front fender assembly. The entrance door is behind the front wheels.

Type D

A Type "D" school bus is constructed utilizing a stripped chassis. The entrance door is ahead of the front wheels.

Code of Federal Regulations 49CFR390.5 - Definitions

Bus means any motor vehicle designed, constructed, and or used for the transportation of passengers, including taxicabs.

School bus means a passenger motor vehicle, which is designed or used to carry more than 10 passengers in addition to the driver, and which the Secretary determines is likely to be significantly used for the purpose of transporting preprimary, primary, or secondary school students to such schools from home or from such schools to home.

School bus operation means the use of a school bus to transport only school children and/or personnel from home to school and from school to home.

Idaho Code 33-1504 - School Buses

A motor vehicle shall be deemed a "school bus" when it has a seating capacity of more than ten (10) persons and meets the current national and state minimum standards for school bus construction, and is owned and operated by a school district or a common carrier and is used exclusively for transporting pupils, or is owned by a transportation contractor and is used regularly for transporting pupils.

Idaho Code 49-120 (5) – School Buses

"School bus" means every motor vehicle that complies with the color and identification requirements set forth in the most recent edition of "Minimum Standards for School Buses" and is used to transport children to or from school or in connection with school approved activities and includes buses operated by contract carriers.

TECHNOLOGY AND EQUIPMENT, NEW

It is the intent of these standards to accommodate new technologies and equipment that will better facilitate the transportation of all students. When a new technology, piece of equipment or component is desired to be applied to the school bus and it meets the following criteria, it may be acceptable.

The technology, equipment or component shall not compromise the effectiveness or integrity of any major safety system, unless it completely replaces the system. (Examples of safety systems include, but are not limited to, compartmentalization, the eight-light warning system, emergency exits, and the yellow color scheme.)

The technology, equipment or component shall not diminish the safe environment of the interior of the bus.

The technology, equipment or component shall not create additional risk to students who are boarding or exiting the bus or are in or near the school bus loading zone.

The technology, equipment or component shall not create undue additional activity and/or responsibility for the driver.

The technology, equipment or component shall generally increase efficiency and/or safety of the bus, or generally provide for a safer or more pleasant experience for the occupants and pedestrians in the vicinity of the bus or generally assist the driver or make his/her many tasks easier to perform.

BUS CHASSIS STANDARDS

AIR CLEANER

A dry element type air cleaner shall be provided.

All diesel engine air filters shall include a latch-type restriction indicator that retains the maximum restriction developed during operation of the engine. The indicator should include a reset control so the indicator can be returned to zero when desired. Type A buses are not exempt from this requirement.

AIR CONDITIONING (NON-REIMBURSABLE OPTION – see exception)

Chassis installed air conditioning must meet the same requirements as those cited in the bus body standards under "Heating and Air Conditioning."

Reimbursement Exception: Air conditioning shall be reimbursable under the pupil transportation support program when the school district can demonstrate a need subsequent to an IDEA mandated related service.

AXLES

The front and rear axle and suspension systems shall have gross axle weight rating (GVWR) at ground commensurate with the respective front and rear weight loads that will be imposed by the bus.

BRAKES (GENERAL)

The chassis brake system shall conform to the provisions of FMVSS No. 105, No. 106 and No. 121 as applicable.

The anti-lock brake system (ABS), provided in accordance with FMVSS No. 105 or No. 121, shall provide wheel speed sensors for each front wheel and for each wheel on at least one rear axle. The system shall provide anti-lock braking performance for each wheel equipped with sensors. (Four Channel System).

All brake systems shall be designed to permit visual inspection of brake lining wear without removal of any chassis component(s).

The brake lines, booster-assist lines, and control cables shall be protected from excessive heat, vibration and corrosion and installed in a manner which prevents chafing.

The parking brake system for either air or hydraulic service brake systems may be of a power assisted design. The power parking brake actuator should be a push-pull device located on the instrument panel within seated reach of a 5th percentile female driver. As an option, the parking

brake may be set by placing the automatic transmission shift control mechanism in the "park" position.

The power-operated parking brake system may be interlocked to the engine key switch. Once the parking brake has been set and the ignition switch turned to the "off" position, the parking brake cannot be released until the key switch is turned back to the "on" position.

The power-operated parking brake system may be electronically interlocked to other vehicle components, e.g., engine key switch, lift door, entrance door, speed control device, etc., provided an appropriate malfunction safeguard is integrated into the interlocking system.

BRAKES (HYDRAULIC)

Buses using a hydraulic or vacuum-assist brake shall be equipped with audible and visible warning signals that provide a continuous warning to the driver of loss of fluid flow from the primary source and of a failure of the back-up pump system. Type A4 and B4 buses may be OEM standard.

For hydraulic brake systems, a service brake pressure application gauge, if OEM available, shall be provided in the instrument panel.

BRAKES (AIR)

The air pressure supply system shall include a desiccant-type air dryer installed according to the manufacturers' recommendations. The air pressure storage tank system may incorporate an automatic drain valve.

The Chassis manufacturer should provide an accessory outlet for air-operated systems installed by the body manufacturer. This outlet shall include a pressure protection valve.

For air brake systems, an air pressure gauge shall be provided in the instrument panel capable of complying with CDL pre-trip inspection requirements.

For air brake systems, a service brake pressure application gauge shall be provided in the instrument panel.

All air brake-equipped buses may be equipped with a service brake interlock. The parking brake cannot be released until the brake pedal is depressed.

Air brake systems may include a system for anti-compounding of the service brakes and parking brakes.

Air brakes shall have both a visible and audible warning device whenever the air pressure falls below the level where warnings are required under FMVSS No. 121.

BUMPER (FRONT)

All school buses shall be equipped with a front bumper. The front bumper shall be furnished by the chassis manufacturer as part of the chassis on all school bus types unless there is a specific arrangement between the chassis manufacturer and body manufacturer.

The front bumper shall be of pressed steel channel or equivalent material (except Type A buses having a GVWR of 14,500 pounds or less which may be OEM supplied) at least 3/16" thick and not less than 8" wide (high). It shall extend beyond forward-most part of the body, grille, hood, and fenders and shall extend to outer edges of the fenders at the bumper's top line.

Front bumper, except breakaway bumper ends, shall be of sufficient strength to permit pushing a vehicle of equal gross vehicle weight without permanent distortion to the bumper, chassis, or body.

A towing device (hooks, eyes, bar) shall be furnished on all school bus types and attached so as not to project beyond the front bumper. Towing devices attached to the frame chassis shall be furnished by the chassis manufacturer. This installation shall be in accordance with the chassis manufacturer's specifications. **NOTE:** Rear tow devices are addressed in the Bus Body Specifications under Towing Attachments Points.

The bumper shall be designed or reinforced so that it will not deform when the bus is lifted by a chain that is passed under the bumper (or through the bumper if holes are provided for this purpose) and attached to the towing device(s). For the purpose of meeting this specification, the bus shall be empty and positioned on a level, hard surface and the towing device(s) shall share the load equally.

CERTIFICATION

The chassis manufacturer, upon request of the Idaho State Department of Education Pupil Transportation Section, shall certify that its product meets all Idaho minimum construction standards on items not covered by the FMVSS certification requirements of 49 CFR, Part 567.

The body manufacturer upon request of the Idaho State Department of Education Pupil Transportation Section, shall certify that its product meets all Idaho minimum construction standards (Standards for Idaho School Buses and Operations) for items not covered by the FMVSS certification requirements of 49 CFR, Part 567.

CLUTCH

Clutch torque capacity shall be equal to or greater than the engine torque output.

A starter interlock shall be installed to prevent actuation of the starter if the clutch pedal is not depressed.

COLOR

The chassis, including axle hubs and front bumper, shall be black. Body cowl, hood, and fenders shall be in national school bus yellow (NSBY). The flat top surface of the hood may be non-reflective black or <u>non-reflective</u> NSBY, according to School Bus Manufacturers Technical Council publication - 008.

Rims may be gray or black as received from the manufacturer.

DRIVE SHAFT

The drive shaft shall be protected by a metal guard or guards around the circumference of the drive shaft to reduce the possibility of its whipping through the floor or dropping to the ground, if broken.

ELECTRICAL SYSTEM

Battery:

The storage battery shall have minimum cold cranking capacity rating (cold cranking amps) equal to the cranking current required for 30 seconds at 0 degrees Fahrenheit and a minimum reserve capacity rating of 120 minutes at 25 amps. Higher capacities may be required, depending upon optional equipment and local environmental conditions.

Since all batteries are to be secured in a sliding tray in the body (type A and B buses may be OEM), chassis manufacturers shall temporarily mount the battery on the chassis frame, except that van conversion or cutaway front-section chassis may be secured in accordance with the manufacturer's standard configuration. In these cases, the final location of the battery and the appropriate cable lengths shall be agreed upon mutually by the chassis and body manufacturer. However, in all cases the battery cable provided with the chassis shall have sufficient length to allow some slack.

Alternator:

All Type A-2 buses and Type B buses with a GVWR of 15,000 lbs or less shall have, at a minimum, a 60 ampere alternator.

Types A-2 and Type B buses over 15,000 lbs. GVWR and all type C and D buses shall be equipped with a heavy-duty truck or bus-type alternator meeting SAE J 180, having a minimum output rating of 100 amperes or higher, and should produce a minimum current output of 50 percent of the rating at engine idle speed.

Buses equipped with an electrically powered wheelchair lift, air conditioning or other accessories may be equipped with a device that monitors the electrical system voltage and advances the engine idle speed when the voltage drops to, or below, a pre-set level.

A belt alternator drive shall be capable of handling the rated capacity of the alternator with no detrimental effect on any other driven components. (See SBMTC; "School Bus Technical Reference," for estimating required alternator capacity.)

A direct drive alternator is permissible in lieu of a belt driven alternator.

Wiring:

All wiring shall conform to current applicable recommended practices of the Society of Automotive Engineers (SAE).

All wiring shall use color and at least one other method of identification. The other method shall be either a number code or name code, and each chassis shall be delivered with a wiring diagram that illustrates the wiring of the chassis.

The chassis manufacturer shall install a readily accessible terminal strip or plug on the body side of the cowl or in an accessible location in the engine compartment of vehicles designed without a cowl. The strip or plug shall contain the following terminals for the body connections:

Main 100 amp body circuit

Tail lamps

Right turn signal

Left turn signal

Stop lamps

Back up lamps

Instrument panel lights (rheostat controlled by head lamp switch)

Circuits:

An appropriate identifying diagram (color plus a name or number code) for all chassis electrical circuits shall be provided to the body manufacturer for distribution to the end user.

The headlight system must be wired separately from the body-controlled solenoid.

Daytime Running Lamps (DRL):

A daytime running lamps system meeting chassis manufacturer's specifications may be provided.

ENGINE FIRE EXTINGUISHER (NON-REIMBURSABLE OPTION – see exception)

The chassis manufacturer may provide an automatic fire extinguisher system in the engine compartment, which may be reimbursable with prior approval.

EXHAUST SYSTEM

The exhaust pipe, muffler and tailpipe shall be outside the bus body compartment and attached to the chassis so as not to damage any other chassis component.

The tailpipe shall be constructed of a corrosion-resistant tubing material at least equal in strength and durability to 16-gauge steel tubing of equal diameter.

Chassis manufacturers shall furnish an exhaust system with tailpipe of sufficient length to exit the rear of the bus or at the left side of the bus body no more than 18 inches forward of the front edge of the rear wheel house opening. If designed to exit at the rear of the bus, the tailpipe shall extend at least five inches beyond the end of the chassis frame. If designed to exit to the side of the bus, the tailpipe shall extend at least 48.5 inches (51.5 inches if the body is to be 102 inches wide) outboard from the chassis centerline.

On Types C and D vehicles, the tailpipe shall not exit beneath a fuel fill or emergency door exit.

Type A and B chassis may be furnished with the manufacturer's standard tailpipe configuration.

NOTE: See Bus Body Standards under Tailpipe.

The exhaust system on a chassis shall be adequately insulated from the fuel system.

The muffler shall be constructed of corrosion-resistant material.

The exhaust system on the chassis may be routed to the left of the right frame rail to allow for the installation of a power lift unit on the right side of the vehicle.

FENDERS: FRONT-TYPE C VEHICLES

Total spread of outer edges of front fenders, measured at fender line, shall exceed total spread of front tires when front wheels are in straight-ahead position.

Front fenders shall be properly braced and shall not require attachment to any part of the body.

FRAME

The frame (or equivalent) shall be of such design and strength characteristics as to correspond at least to standard practices for trucks of the same general load characteristics which are used for highway service.

Any secondary manufacturer that modifies the original chassis frame shall guarantee the performance of workmanship and materials resulting from such modification.

Frames shall not be modified for the purpose of extending the wheelbase.

Holes in top or bottom flanges or side units of the frame, and welding to the frame, shall not be permitted except as provided or accepted by chassis manufacturer.

Frame lengths shall be established in accordance with the design criteria for the complete vehicle.

FUEL TANK

Fuel tank (or tanks) having a minimum 30-gallon capacity shall be provided by the chassis manufacturer. The tank shall be filled and vented to the outside of the body and the fuel filler should be placed in a location where accidental fuel spillage will not drip or drain on any part of the exhaust system.

Fuel lines shall be mounted to the chassis frame in such a manner that the frame provides the maximum possible protections from damage.

The fuel system shall comply with FMVSS No. 301.

Fuel tank(s) may be mounted between the chassis frame rails or outboard of the frame rails on either the left or right side of the vehicle.

The actual draw capacity of each fuel tank shall be, at a minimum, 83 percent of the tank capacity.

Installation of alternative fuel systems, including fuel tanks and piping from tank to engine, shall comply with all applicable fire codes in effect on the date of manufacture of the bus.

Installation of LPG tanks shall comply with National Fire Protection Association (NFPA) 58.

GOVERNOR

When the engine is remotely located from driver, the governor shall be set to limit engine speed to maximum revolutions per minute as recommended by engine manufacturer, and a tachometer shall be installed so the engine speed may be known to the driver while seated in a normal driving position.

HEATING SYSTEM, PROVISION FOR

The chassis engine shall have plugged openings for the purpose of supplying hot water for the bus heating system. The openings shall be suitable for attaching 3/4 inch pipe thread/hose connectors. The engine shall be capable of supplying coolant at a temperature of at least 170 degrees Fahrenheit at the engine cooling thermostat opening temperature. The coolant flow rate shall be 50 pounds per minute at the return end of 30 feet of one-inch inside diameter automotive

hot water heater hose, according to School Bus Manufacturers Technical Council publication - 001.

HORN

The bus shall be equipped with two horns of standard make with each horn capable of producing a complex sound in bands of audio frequencies between 250 and 2,000 cycles per second and tested in accordance with SAE J-377.

INSTRUMENTS AND INSTRUMENT PANEL

The chassis shall be equipped with the instruments and gauges listed below. (Telltale warning lamps in lieu of gauges are not acceptable, except as noted.)

Speedometer

Tachometer (gas and diesel engines)

Odometer which will give accrued mileage (to seven digits), including tenths of miles.

Voltmeter

(An ammeter with graduated charge and discharge indications is permitted in lieu of a voltmeter; however, when used, the ammeter wiring must be compatible with the current flow of the system.)

Oil pressure gauge

Water temperature gauge

Fuel gauge

Upper beam headlight indicator

Brake indicator gauge (vacuum or air)

(A telltale warning lamp indicator in lieu of gauge is permitted on a vehicle equipped with a hydraulic-over-hydraulic brake system.

Turn signal indicator

Glow-plug indicator light where appropriate

All instruments shall be easily accessible for maintenance and repair.

The instruments and gauges shall be mounted on the instrument panel so that each is clearly visible to the driver while seated in a normal driving position.

The instrument panel shall have lamps of sufficient candlepower to illuminate all instruments, gauges and shift selector indicator for the automatic transmission.

Multi-function gauge (MFG) (Optional)

The driver must be able to manually select any displayable function of the gauge on a MFG whenever desired.

Whenever an out-of-limits condition that would be displayed on one or more functions of a MFG occurs, the MFG controller should automatically display this condition on the instrument cluster. This should be in the form of an illuminated telltale warning lamp as well as having the MFG automatically display the out-of-limits indications. Should two or more functions displayed on the MFG go out of limits simultaneously, then the MFG should sequence automatically between those functions continuously until the condition(s) are corrected.

The use of a MFG does not relieve the need for audible warning devices, where required.

OIL FILTER

An oil filter with a replaceable element shall be provided and connected by flexible oil lines if it is not a built-in or an engine-mounted design. The oil filter shall have a capacity of at least one (1) quart.

OPENINGS

All openings in the floorboard or firewall between the chassis and passenger compartment (e.g., for gearshift selector and parking brakes lever) shall be sealed.

PASSENGER LOAD

Actual gross vehicle weight (GVW) is the sum of the chassis weight, plus the body weight, plus the driver's weight, plus total seated pupil weight. For purposes of calculation, the driver's weight is 150 pounds and the pupil weight is 120 pounds per pupil.

Actual GVW shall not exceed the chassis manufacturer's GVWR for the chassis, nor shall the actual weight carried on any axle exceed the chassis manufacturer's Gross Axle Weight Rating (GAWR).

When requested, the manufacturer's GVWR for a particular school bus shall be furnished by manufacturers in duplicate (unless more copies are requested) to the purchasing school district or contractor.

POWER AND GRADE ABILITY

GVWR shall not exceed 185 pounds per published net horsepower of the engine at the manufacturer's recommended maximum number of revolutions per minute.

RETARDER SYSTEM (OPTIONAL EQUIPMENT)

School districts should, at a minimum, equip spare and activity school buses with retarder systems.

ROAD SPEED CONTROL

When it is desired to accurately control vehicle maximum speed, a vehicle speed limiter may be utilized.

SHOCK ABSORBERS

The bus shall be equipped with double-action shock absorbers compatible with manufacturer's rated axle capacity at each wheel location. Shock absorbers shall be of sufficient length to allow for adequate travel in all situations without damage to the shock absorber or mounts.

STEERING GEAR

The steering gear shall be approved by the chassis manufacturer and designed to ensure safe and accurate performance when the vehicle is operated with maximum load and at maximum speed.

If external adjustments are required, steering mechanism shall be accessible to make adjustments.

No changes shall be made in the steering apparatus which are not approved by the chassis manufacturer.

There shall be a clearance of at least two inches between the steering wheel and cowl, instrument panel, windshield, or any other surface.

Power steering is required and shall be of the integral type with integral valves.

The steering system shall be designed to provide a means for lubrication of all wear-points, which are not permanently lubricated.

SUSPENSION SYSTEMS

The capacity of springs or suspension assemblies shall be commensurate with the chassis manufacturer's GVWR.

Rear leaf springs shall be of a progressive rate or multi-stage design. Front leaf springs shall have a stationary eye at one end and shall be protected by a wrapped leaf, in addition to the main leaf

THROTTLE

The force required to operate the throttle shall not exceed 16 pounds throughout the full range of accelerator pedal travel.

TIRES AND RIMS

Rims of the proper size and tires of the proper size and load rating commensurate with the chassis manufacturer's gross vehicle weight rating shall be provided. The use of multi-piece rims and/or tube-type tires shall not be permitted on any school bus ordered after December 31, 1995.

Dual rear tires shall be provided on Type A-2, Type B, Type C and Type D school buses.

All tires on a vehicle shall be of the same size, and the load range of the tires shall meet or exceed the GVWR, as required by FMVSS 120.

If the vehicle is equipped with a spare tire and rim assembly, it shall be the same size as those mounted on the vehicle.

If a tire carrier is required, it shall be suitably mounted in an accessible location outside the passenger compartment.

TRANSMISSION

Automatic transmissions shall have no fewer than three forward speeds and one reverse speed. Mechanical shift selectors shall provide a detent between each gear position when the gear selector quadrant and shift selector are not steering-column mounted.

In manual transmissions, second gear and higher shall be synchronized, except when incompatible with engine power. A minimum of three forward speeds and one reverse speed shall be provided.

An electronic control, or similar device, may be installed to ensure that automatic transmissions cannot accidentally be moved out of the "neutral" or "park" gear position while the driver is not in the driver's seat.

TURNING RADIUS

A chassis with a wheelbase of 264 inches or less shall have a right and left turning radius of not more than $42\frac{1}{2}$ feet, curb-to-curb measurement.

A chassis with a wheelbase of 265 inches or more shall have a right and left turning radius of not more than $44\frac{1}{2}$ feet, curb-to-curb measurement.

UNDERCOATING

The chassis manufacturers, or their agents, shall coat the undersides of steel or metallic-constructed front fenders with a rust-proofing compound, for which the compound manufacturer has issued notarized certification of compliance to chassis builder that the compound meets or exceeds all performance and qualitative requirements of paragraph 3.4 of Federal Specification TT-C-520B, using modified tests.

BUS BODY STANDARDS

AIR CONDITIONING (NON-REIMBURSABLE OPTION – see exception)

Body manufacture, or after-market, installed air conditioning must meet the same requirements as those cited under "Heating and Air Conditioning."

Reimbursement Exception: Air conditioning shall be reimbursable under the Pupil Transportation Support Program when the school district can demonstrate a need subsequent to an IDEA mandated related service.

AISLE

All emergency doors shall be accessible by a 12-inch minimum aisle. The aisle shall be unobstructed at all times by any type of barrier, seat, wheelchair or tiedown. Flip seats are not allowed.

The seat backs shall be slanted sufficiently to give aisle clearance of 15 inches at tops of seat backs.

Side emergency doors in excess of FMVSS and Standards for Idaho School Buses and Operations requirements may be secured and made inoperable; however, in doing so, all emergency door labeling, reflective markings, operation instructions, operating handles and all audible and visible warning devices shall be removed and no emergency egress aisle at that location shall exist.

BACK-UP WARNING ALARM

An automatic audible alarm shall be installed behind the rear axle and shall comply with the published Backup Alarm Standards (SAE J994B), providing a minimum of 112 dBA.

BATTERY

The battery is to be furnished by the chassis manufacturer.

When the battery is mounted as described in the "Bus Chassis Specifications", the body manufacturer shall securely attach the battery on a slide-out or swing-out tray in a closed, vented compartment in the body skirt, so that the battery is accessible for convenient servicing from the outside. The battery compartment door or cover shall be hinged at the front or top, and be secured by an adequate and conveniently operated latch or other type fastener. The battery compartment is not required on Type A-1 buses.

Buses may be equipped with a battery shut-off switch. The switch is to be placed in a location not readily accessible to the driver or passengers.

BUMPER: FRONT

On a Type D school bus, if the chassis manufacturer does not provide a bumper, it shall be provided by the body manufacturer. The bumper will conform to the standards described in the "Bus Chassis Specifications."

BUMPER: REAR

The bumper shall be pressed steel channel at least 3/16 inch thick or equivalent strength material (except for Type A buses). Type A-1 buses bumper shall be a minimum of 8 inches wide (high) and Type A-2, B, C and D buses bumper shall be a minimum of 9 1/2 inches wide (high). The bumper shall be of sufficient strength to permit being pushed by another vehicle without permanent distortion.

The bumper shall be wrapped around back corners of the bus. It shall extend forward at least 12 inches, measured from the rear-most point of the body at the floor line, and shall be flushmounted to body sides or protected with an end panel.

The bumper shall be attached to the chassis frame in such a manner that it may be easily removed. It shall be so braced as to withstand impact from the rear or side. It shall be so attached as to discourage hitching of rides by an individual.

The bumper shall extend at least 1 inch beyond the rear-most part of body surface measured at the floor line

CEILING

See Insulation and Interior, this section.

CERTIFICATION

The body manufacturer upon request of the Idaho State Department of Education Pupil Transportation Section, shall certify that its product meets all Idaho minimum construction standards (Standards for Idaho School Buses and Operations) for items not covered by the FMVSS certification requirements of 49 CFR, Part 567.

CHAINS (TIRE)

See Wheelhousing, this section.

COLOR

The school bus body shall be painted National School Bus Yellow (NSBY), according to School Bus Manufacturers Technical Council publication - 008.

The entire rubrail and body exterior paint trim shall be black.

Optionally, the roof of the bus may be painted white (<u>non-reimbursable</u>) except that the front and rear roof caps shall remain NSBY, according to National School Transportation Specifications & Procedures Placement of Reflective Markings.

COMMUNICATIONS

All school buses used to transport students shall be equipped with two-way voice communication other than CB radios.

CONSTRUCTION

Side Intrusion Test: The bus body shall be constructed to withstand an intrusion force equal to the curb weight of the vehicle; but shall not exceed 20,000 pounds, whichever is less. Each vehicle shall be capable of meeting this requirement when tested in accordance with the procedures set forth below.

The complete body structure, or a representative seven-body section mock up with seats installed, shall be load-tested at a location 24 inches plus or minus two inches above the floor line, with a maximum 10-inch diameter cylinder, 48 inches long, mounted in a horizontal plane.

The cylinder shall be placed as close as practical to the mid-point of the tested structure, spanning two internal vertical structural members. The cylinder shall be statically loaded to the required force of curb weight or 20,000 pounds, whichever is less, in a horizontal plane with the load applied from the exterior toward the interior of the test structure. Once the minimum load has been applied, the penetration of the loading cylinder into the passenger compartment shall not exceed a maximum of ten inches from its original point of contact. There can be no separation of lapped panels or construction joints. Punctures, tears or breaks in the external panels are acceptable but are not permitted on any adjacent interior panel.

Body companies shall certify compliance with this intrusion requirement, including test results, if requested.

Construction shall be reasonably dust-proof and watertight.

CROSSING CONTROL ARM (OPTIONAL)

Buses may be equipped with a crossing control arm mounted on the right side of the front bumper. This arm when opened shall extend in a line parallel with the body side and positioned on a line with the right side wheels.

All components of the crossing control arm and all connections shall be weatherproofed.

The crossing control arm shall incorporate system connectors (electrical, vacuum or air) at the gate and shall be easily removable to allow for towing of the bus.

The crossing control arm shall meet or exceed SAE Standard J1133.

The crossing control arm shall be constructed of noncorrosive or nonferrous material or treated in accordance with the body sheet metal specifications. (see METAL TREATMENT)

There shall be no sharp edges or projections that could cause hazard or injury to students.

The crossing control arm shall extend a minimum of 70 inches (measured from the bumper at the arm assembly attachment point) when in the extended position.

The crossing control arm shall extend simultaneously with the stop arm(s) by means of the stop arm controls.

An automatic recycling interrupt switch should be installed for temporary disabling of the crossing control arm.

DEFROSTERS

Defrosting and defogging equipment shall direct a sufficient flow of heated air onto the windshield, the window to the left of the driver and the glass in the viewing area directly to the right of the driver to eliminate frost, fog and snow.

The defrosting system shall conform to SAE J381 and J382.

The defroster and defogging system shall be capable of furnishing heated, outside ambient air, except that the part of the system furnishing additional air to the windshield, entrance door and stepwell may be of the recirculating air type.

Auxiliary fans are not considered defrosting or defogging systems.

Portable heaters shall not be used. Low profile heaters are not allowed within the clear floor area required to accommodate a wheelchair.

DOORS, SERVICE

The service door shall be in the driver's control, designed to afford easy release and to provide a positive latching device on manual operating doors to prevent accidental opening. When a hand lever is used, no part shall come together that will shear or crush fingers. Manual door controls shall not require more than 25 pounds of force to operate at any point throughout the range of operation, as tested on a 10 percent grade both uphill and downhill.

The service door shall be located on the right side of the bus, opposite and within direct view of driver.

The service door shall have a minimum horizontal opening of 24 inches and a minimum vertical opening of 68 inches. Type A-1 vehicles shall have a minimum opening area of 1,200 square inches.

Service door shall be a split-type, sedan-type, or jackknife type. (Split-type door includes any sectioned door which divides and opens inward or outward.) If one section of a split-type door opens inward and the other opens outward, the front section shall open outward.

Lower, as well as upper, door panels shall be of approved safety glass. The bottom of each lower glass panel shall not be more than ten inches from the top surface of the bottom step. The top of each upper glass panel shall not be more than three inches from the top of the door. Type A vehicles shall have an upper panel (windows) of safety glass with an area of at least 350 square inches.

Vertical closing edges on split-type or folding-type entrance doors shall be equipped with flexible material to protect children's fingers. Type A-1 vehicles may be equipped with the chassis manufacturer's standard entrance door.

There shall be no door to left of driver on Type B, C or D vehicles. All Type A vehicles may be equipped with the chassis manufacturer's standard left-side door.

All doors shall be equipped with padding at the top edge of each door opening. Padding shall be at least three inches wide and one inch thick and extend the full width of the door opening.

On power-operated service doors, the emergency release valve, switch or device to release the service door must be placed above or to the immediate left or right of the service door and clearly labeled.

EMERGENCY EXITS AND EMERGENCY EXIT ALARM SYSTEMS

All installed emergency exits and all exit alarm systems shall comply with the requirements of FMVSS No. 217.

The upper portion of the emergency door shall be equipped with approved safety glazing, the exposed area of which shall be at least 400 square inches. The lower portion of the rear emergency doors on Types A-2, B, C, and D vehicles shall be equipped with a minimum of 350 square inches of approved safety glazing.

There shall be no steps leading to an emergency door.

The words "EMERGENCY DOOR" or EMERGENCY EXIT," in letters at least 2" high, shall be placed at the top of or directly above the emergency exit, or on the door in the metal panel above the top glass, both inside and outside the bus.

The emergency door(s) shall be equipped with padding at the top edge of each door opening. Padding shall be at least three inches wide and one inch thick, and shall extend the full width of the door opening.

There shall be no obstruction higher than ¼ inch across the bottom of any emergency door opening.

Operation instructions shall be located at or near the emergency exit release handle, both inside and outside of the bus. Outside may consist of a black arrow pointing in direction of handle travel. No other lettering shall obstruct or interfere with the placement of operation instructions mounted on the exterior of the emergency exit door.

The rear emergency window shall have an assisted lifting device that will aid in lifting and holding the rear emergency window open.

Types A, B, C and D vehicles shall be equipped with a total number of emergency exits as follows for the indicated capacities of vehicles. Exits required by FMVSS 217 may be included to comprise the total number of exits specified.

```
O to 42 Passengers = 1 emergency exit per side and 1 roof hatch.
43 to 78 Passengers = 2 emergency exits per side and 2 roof hatches.
79 to 90 Passengers = 3 emergency exits per side and 2 roof hatches.
```

Side emergency exit windows, when installed, may be vertically hinged on the forward side of the window. No side emergency exit window will be located above a stop arm. Emergency exit doors, side emergency exit windows and emergency exit roof hatches shall be strategically located for optimal egress during an emergency evacuation of the bus.

Emergency exit doors shall include an alarm system that includes an audible warning device at the emergency door exit and also in the driver's compartment. Emergency exit side windows shall include an alarm system that includes an audible warning device in the driver's compartment. Roof hatches do not require an alarm system, but if so equipped, they must be operable and include an audible warning device in the driver's compartment.

When manually operated dual doors are provided, the rear door shall have at least a one-point fastening device to the header. The forward-mounted door shall have at least three one-point fastening devices. One shall be to the header, one to the floor line of the body, and the other shall be into the rear door. The door and hinge mechanism shall be of a strength that is greater than or equivalent to the emergency exit door.

EMERGENCY EQUIPMENT

Fire extinguisher:

The bus shall be equipped with at least one UL-approved pressurized, dry chemical fire extinguisher complete with hose. The extinguisher shall be mounted and secured in a bracket,

located in the driver's compartment and readily accessible to the driver and passengers. A pressure gauge shall be mounted on the extinguisher and be easily read without moving the extinguisher from its mounted position.

The fire extinguisher shall have a total rating of 2A10BC or greater. The operating mechanism shall be sealed with a type of seal that will not interfere with the use of the fire extinguisher.

First-aid kit:

The bus shall have a removable, moisture-proof and dust-proof first aid kit sealed with a breakable type seal and mounted in the driver's compartment in a location that is physically accessible to all drivers. It shall be properly mounted and secured and identified as a first aid kit. The location for the first aid kit shall be marked.

Contents shall, at a minimum, include:

- 2-1 inch x 2 1/2 yards adhesive tape rolls
- 24 sterile gauze pads 3 inches x 3 inches
- 100 3/4 inch x 3 inches adhesive bandages
- 8 2 inch bandage compress
- 10 3 inch bandage compress
- 2-2 inch x 6 feet sterile gauze roller bandages
- 2 non-sterile triangular bandages approximately 39 inches x 35 inches x 54 inches with 2 safety pins
- 3 sterile gauze pads 36 inches x 36 inches
- 3 sterile eye pads
- 1 rounded-end scissors
- 1 mouth-to-mouth airway

Body fluid clean-up kit:

Each bus shall have a removable and moisture-proof body fluid clean-up kit. It shall be sealed with a breakable type seal. It shall be properly mounted in the driver's compartment in a location that is physically accessible to all drivers and identified as a body fluid clean-up kit.

Contents shall, at a minimum, include:

- One (1) pair medical examination gloves
- Absorbent
- One (1) scoop
- One (1) scraper or hand broom
- Disinfectant
- Two (2) plastic bags

Warning devices:

Each school bus shall contain at least three (3) reflectorized triangle road warning devices mounted in an accessible place that meet requirements in FMVSS 125.

Any of the emergency equipment may be mounted in an enclosed compartment, provided the compartment is labeled in not less than one-inch letters, identifying each piece of equipment contained therein

Ignitable flares and axes are not allowed on school buses.

FLOORS

The floor in the under-seat area, including tops of wheelhousing, driver's compartment and toeboard, shall be covered with rubber floor covering or equivalent, having a minimum overall thickness of .125 inch. The driver's area on all Type A buses may be manufacturer's standard flooring and floor covering.

The floor covering in the aisles shall be of aisle-type rubber or equivalent, wear-resistant and ribbed. Minimum overall thickness shall be .187 inch measured from tops of ribs.

The floor covering must be permanently bonded to the floor and must not crack when subjected to sudden changes in temperature. Bonding or adhesive material shall be waterproof and shall be a type recommended by the manufacturer of floor-covering material. All seams must be sealed with waterproof sealer.

On Types B, C and D buses, a flush-mounted, screw-down plate that is secured and sealed shall be provided to access the fuel tank sending unit.

Low profile heaters are not allowed within the clear floor area required to accommodate a wheelchair.

HANDRAILS

At least one handrail shall be installed. The handrail(s) shall assist passengers during entry or exit, and be designed to prevent entanglement, as evidenced by the passage of the NHTSA string and nut test, as defined in National School Transportation Specifications & Procedures School Bus Inspection.

HEATERS AND AIR CONDITIONING SYSTEMS

Heating System:

The heater shall be hot water and/or combustion type.

If only one heater is used, it shall be fresh-air or combination fresh-air and recirculation type.

If more than one heater is used, additional heaters may be recirculating air type.

The heating system shall be capable of maintaining bus interior temperatures as specified in SAE test procedure J2233.

Auxiliary fuel-fired heating systems (<u>non-reimbursable</u>) are permitted, provided they comply with the following:

The auxiliary heating system fuel shall utilize the same type fuel as specified for the vehicle engine.

The heater(s) may be direct hot air or connected to the engine's coolant system.

An auxiliary heating system, when connected to the engine's coolant system, may be used to preheat the engine coolant or preheat and add supplementary heat to the bus's heating system.

Auxiliary heating systems must be installed pursuant to the manufacturer's recommendations and shall not direct exhaust in such a manner that will endanger bus passengers.

Auxiliary heating systems which operate on diesel fuel shall be capable of operating on #1, #2 or blended diesel fuel without the need for system adjustment.

The auxiliary heating system shall be low voltage.

Auxiliary heating systems shall comply with all applicable FMVSSs, including FMVSS No. 301, as well as with SAE test procedures.

All forced air heaters installed by body manufacturers shall bear a name plate that indicates the heater rating in accordance with SBMTC-001. The plate shall be affixed by the heater manufacturer and shall constitute certification that the heater performance is as shown on the plate. Low profile heaters are not allowed within the clear floor area required to accommodate a wheelchair.

Heater hoses shall be adequately supported to guard against excessive wear due to vibration. The hoses shall not dangle or rub against the chassis or any sharp edges and shall not interfere with or restrict the operation of any engine function. Heater hoses shall conform to SAE J20c. Heater lines on the interior of bus shall be shielded to prevent scalding of the driver or passengers. All heater hose shields shall completely cover all parts of the hose and connectors in such a way as to prevent burning subsequent to significant heat transferring to the shield. They shall not incorporate any openings that would allow a passenger to be injured by sharp edges or hot surfaces.

Each hot water system installed by a body manufacturer shall include one shut-off valve in the pressure line and one shut-off valve in the return line with both valves at the engine in an

accessible location, except that on all Types A and B buses, the valves may be installed in another accessible location.

There shall be a water flow regulating valve installed in the pressure line for convenient operation by the driver while seated.

All combustion heaters shall be in compliance with current Federal Motor Carrier Safety Administration Regulations.

Accessible bleeder valves shall be labeled and installed in an appropriate place in the return lines of body company-installed heaters to remove air from the heater lines.

Access panels shall be provided to make heater motors, cores, and fans readily accessible for service. An outside access panel may be provided for the driver's heater.

Air Conditioning (Non-Reimbursable Option):

The following specifications are applicable to all types of school buses that may be equipped with air conditioning. This section is divided into two parts:

Part 1 covers performance specifications and Part 2 covers other requirements applicable to all buses.

Part 1 - Performance Specifications:

The installed air conditioning system should cool the interior of the bus down to at least 80 degrees Fahrenheit, measured at a minimum of three points, located four feet above the floor at the longitudinal centerline of the bus. The three points shall be: (1) near the driver's location, (2) at the mid point of the body, and (3) two feet forward of the rear emergency door, or, for Type D rear-engine buses, two feet forward of the end of the aisle.

The test conditions under which the above performance must be achieved shall consist of: (1) placing the bus in a room (such as a paint booth) where ambient temperature can be maintained at 100 degrees Fahrenheit (2) heat soaking the bus at 100 degrees Fahrenheit with windows open for at least one hour and (3) closing windows, turning on the air conditioner with the engine running at the chassis manufacturer's recommended low idle speed, and cooling the interior of the bus to 80 degrees Fahrenheit or lower within a maximum of 30 minutes while maintaining 100 degrees Fahrenheit outside temperature.

Alternately, and at the user's discretion, this test may be performed under actual summer conditions, which consist of temperatures above 85 degrees Fahrenheit, humidity above 50 percent with normal sun loading of the bus and the engine running at the manufacturer's recommended low idle speed. After a minimum of one hour of heat soaking, the system shall be turned on and must provide a minimum 20-degree temperature drop in the 30-minute time limit.

The manufacturer shall provide facilities for the user or user's representative to confirm that a pilot model of each bus design meets the above performance requirements.

Part 2 - Other Requirements:

Evaporator cases, lines and ducting (as equipped) shall be designed in such a manner that all condensation is effectively drained to the exterior of the bus below the floor level under all conditions of vehicle movement and without leakage on any interior portion of bus.

Any evaporator or ducting system shall be designed and installed so as to be free of injury-prone projections or sharp edges. Any ductwork shall be installed so that exposed edges face the front of the bus and do not present sharp edges.

On specially equipped school buses, the evaporator and ducting (if used) shall be placed high enough that they will not obstruct occupant securement shoulder strap upper attachment points. This clearance shall be provided along entire length of the passenger area on both sides of the bus interior to allow for potential retrofitting of new wheelchair positions and occupant securement devices throughout the bus.

The body may be equipped with insulation, including sidewalls, roof, firewall, rear, inside body bows and plywood or composite floor insulation to aid in heat dissipation and reflection.

All glass (windshield, service and emergency doors, side and rear windows) may be equipped with maximum integral tinting allowed by federal, state or ANSI standards for the respective locations, except that windows rear of the driver's compartment, if tinted (non-reimbursable), shall have approximately 28 percent light transmission.

Electrical generating capacity shall be provided to accommodate the additional electrical demands imposed by the air conditioning system.

Roofs may be painted white <u>(non-reimbursable)</u> to aid in heat dissipation, according to National School Transportation Specifications & Procedures Placement of Reflective Markings.

HINGES

All exterior metal door hinges which do not have stainless steel, brass or nonmetallic hinge pins or other designs that prevent corrosion shall be designed to allow lubrication to be channeled to the center 75 percent of each hinge loop without disassembly.

IDENTIFICATION

The body shall bear the words "SCHOOL BUS" in black letters at least eight inches high on both front and rear of the body or on signs attached thereto. Lettering shall be placed as high as possible without impairment of its visibility. Letters shall conform to "Series B" of Standard Alphabets for Highway Signs. "SCHOOL BUS" lettering shall have a reflective background, or as an option, may be illuminated by backlighting.

Required lettering and numbering shall include:

School district owned vehicles will be identified with black lettering (minimum four inches (4") high) on both sides of the school bus using the district name and number listed in the Idaho Educational Directory. Exception: Contractor-owned buses registered under P.U.C. (Public Utilities Commission) regulations must meet P.U.C. identification standards. Contractor-owned school buses under contract with a school district must also comply with the same identification standards as district-owned buses and shall be identified by either the contractor or district name, as decided by the district.

Each district-owned or contracted school bus will be separately identified with its own number in two (2) places on each side of the bus in the logo panel/belt line using six inch (6") high black numbers. Numbers on the passenger side shall be as close to the first and last passenger windows as possible and on the driver's side as close to the stop arm and last passenger window as possible.

Unauthorized entry placards shall be displayed in the most visible location when observed by persons approaching the vehicle with the door in the open position. Permanence of the placard should be a consideration when choosing a location for attachment. Placard shall read as follows:

WARNINGIT IS UNLAWFUL TO:

Enter a school bus with the intent to commit a crime Enter a school bus and disrupt or interfere with the driver Refuse to disembark after ordered to do so (18-1522; 18-113, Idaho Code)

<u>State Department of Education Pupil Transportation Section may provide unauthorized entry placards.</u>

Other lettering, numbering, or symbols, which may be displayed on the exterior of the bus, shall be limited to:

Bus identification number on the top, front and rear of the bus, in addition to the required numbering on the sides.

The location of the battery(ies) identified by the word "BATTERY" or "BATTERIES" on the battery compartment door in two-inch maximum lettering.

Symbols or letters not to exceed 64 square inches of total display near the service door, displaying information for identification by the students of the bus or route served.

Manufacturer, dealer or school identification or logos displayed so as not to distract significantly from school bus body color specifications.

Symbols identifying the bus as equipped for or transporting students with special needs (see Specially Equipped School Bus section).

Lettering on the rear of the bus relating to school bus flashing signal lamps or railroad stop procedures. This lettering shall not obscure or interfere with the operation instructions displayed on the exterior portion of the rear emergency exit door.

Identification of fuel type in two-inch maximum lettering adjacent to the fuel filler opening.

One (3" x 5" maximum) decal promoting school bus safety on rear bumper.

INSIDE HEIGHT

Inside body height shall be 72" or more, measured metal to metal, at any point on longitudinal centerline from front vertical bow to rear vertical bow. Inside body height of Type A-1 buses shall be 62" or more.

INSULATION (OPTIONAL)

If thermal insulation is specified, it shall be fire-resistant, UL approved, with minimum R-value of 5.5. Insulation shall be installed so as to prevent sagging.

If floor insulation is required, it shall be five ply nominal 5/8 inch thick plywood, and it shall equal or exceed properties of the exterior-type softwood plywood, C-D Grade, as specified in standard issued by U.S. Department of Commerce. When plywood is used, all exposed edges shall be sealed. Type A-1 buses may be equipped with nominal ½ inch thick plywood or equivalent material meeting the above requirements. Equivalent material may be used to replace plywood, provided it has an equal or greater insulation R-value, deterioration, sound abatement and moisture resistance properties.

INTERIOR

The interior of bus shall be free of all unnecessary projections, which include luggage racks and attendant handrails, to minimize the potential for injury. This specification requires inner lining on ceilings and walls. If the ceiling is constructed to contain lapped joints, the forward panel shall be lapped by rear panel and exposed edges shall be beaded, hemmed, flanged, or otherwise treated to minimize sharp edges. Buses may be equipped with a storage compartment for tools, tire chains and/or tow chains. (see STORAGE COMPARTMENT)

Non-reimbursable interior overhead storage compartments may be provided if they meet the following criteria:

Meet head protection requirements of FMVSS 222, where applicable.

Have a maximum rated capacity displayed for each compartment.

Be completely enclosed and equipped with latching doors which must be sufficient to withstand a force of five times the maximum rated capacity of the compartment.

Have all corners and edges rounded with a minimum radius of one-inch or padded equivalent to door header padding.

Be attached to the bus sufficiently to withstand a force equal to twenty times the maximum rated capacity of the compartment.

Have no protrusions greater than ¼ inch.

The driver's area forward of the foremost padded barriers will permit the mounting of required safety equipment and vehicle operation equipment. All equipment necessary for the operation of the vehicle shall be properly secured in such a way as to prevent the entanglement of clothing, backpack straps, drawstrings, etc.

Every school bus shall be constructed so that the noise level taken at the ear of the occupant nearest to the primary vehicle noise source shall not exceed 85 dbA when tested according to National School Transportation Specifications & Procedures Noise Test Procedure.

Low profile heaters are not allowed within the clear floor area required to accommodate a wheelchair

LAMPS AND SIGNALS

Interior lamps shall be provided which adequately illuminate the aisle and stepwell. The stepwell light shall be illuminated by a service door-operated switch, to illuminate only when headlights and clearance lights are on and the service door is open. An additional exterior mounted light shall be mounted next to the service door to adequately illuminate the outside approach to the door. It shall be actuated simultaneously with the stepwell light.

Body instrument panel lights shall be controlled by an independent rheostat switch.

School Bus Alternately Flashing Signal Lamps:

The bus shall be equipped with two red lamps at the rear of vehicle and two red lamps at the front of the vehicle.

In addition to the four red lamps described above, four amber lamps shall be installed so that one amber lamp is located near each red signal lamp, at the same level, but closer to the vertical centerline of bus. The system of red and amber signal lamps, when in its operational mode, shall be wired so that amber lamps are energized manually, and red lamps are automatically energized (with amber lamps being automatically de-energized) when stop signal arm is extended or when bus service door is opened. An amber pilot light and a red pilot light shall be installed adjacent

to the driver controls for the flashing signal lamp to indicate to the driver which lamp system is activated.

Air and electrically operated doors may be equipped with an over-ride switch that will allow the red lamps to be energized without opening the door, when the alternately flashing signal lamp system is in its operational mode. The use of such a device shall be in conformity with the law and SDE loading/unloading training procedures, as contained in Idaho's school bus driver training curriculum.

The area around the lenses of alternately flashing signal lamps extending outward from the edge of the lamps three inches (+/- 1/4 inch) to the sides and top and minimum one inch to the bottom, shall be black in color on the body or roof area against which the signal lamp is seen (from a distance of 500 feet along axis of the vehicle).

Visors or hoods over the lights shall be provided and shall be black in color, with a minimum depth of four inches, according to National School Transportation Specifications & Procedures Placement of Reflective Markings.

Red lamps shall flash at any time the stop signal arm is extended.

All flashers for alternately flashing red and amber signal lamps shall be enclosed in the body in a readily accessible location.

Turn Signal and Stop/Tail Lamps:

Bus body shall be equipped with amber front and rear turn signal lamps that are at least seven inches in diameter or, if a shape other than round, a minimum 38 square inches of illuminated area and shall meet SAE specifications. These signal lamps must be connected to the chassis hazard-warning switch to cause simultaneous flashing of turn signal lamps when needed as vehicular traffic hazard warning. Rear turn signal lamps are to be placed as wide apart as practical and their centerline shall be a maximum of 12 inches below the rear window. Type A-1 conversion vehicle front lamps must be at least 21 square inches in lens area and must be in the manufacturer's standard color.

Buses shall be equipped with amber side-mounted turn signal lights. One turn signal lamp on the left side shall be mounted rearward of the stop signal arm and one turn signal lamp on the right side shall be mounted rearward of the service door. Both front side-mounted turn signal lamps shall be mounted forward of the bus center-line. An additional side mounted turn signal lamp may be mounted on each side of the bus to the rear of the bus center-line.

Buses shall be equipped with four combination red stop/tail lamps:

Two combination lamps with a minimum diameter of seven inches, or if a shape other than round, a minimum 38 square inches of illuminated area shall be mounted on the rear of the bus just inside the turn signal lamps.

Two combination lamps with a minimum diameter of four inches, or if a shape other than round, a minimum of 12 square inches of illuminated area, shall be placed on the rear of the body between the beltline and the floor line. The rear license plate lamp may be combined with one lower tail lamp. Stop lamps shall be activated by the service brakes and shall emit a steady light when illuminated. Type A-1 buses with bodies supplied by chassis manufacturer may be equipped with manufacturer's standard stop and tail lamps.

On buses equipped with a monitor for the front and rear lamps of the school bus, the monitor shall be mounted in full view of the driver. If the full circuit current passes through the monitor, each circuit shall be protected by a fuse or circuit breaker against any short circuit or intermittent shorts.

An optional white flashing strobe light may be installed on the roof of a school bus, at a location not to exceed 1/3 the body length forward from the rear of the roof edge. The light shall have a single clear lens emitting light 360 degrees around its vertical axis and may not extend above the roof more than maximum legal height. A manual switch and a pilot light shall be included to indicate when light is in operation. Operation of the strobe light is limited to periods of inclement weather and nighttime driving or whenever students are on-board. Optionally, the strobe light may be mounted on the roof in the area directly over the restraining barrier on the driver's side, may be wired to activate with the amber alternately flashing signal lamps, continuing through the full loading or unloading cycle, and may be equipped with an override switch to allow activation of the strobe at any time for use in inclement weather or emergency situation.

The bus body shall be equipped with two white rear backup lamp signals that are at least four inches in diameter or, if a shape other than round, a minimum of 13 square inches of illuminated area, meeting FMVSS No. 108. If backup lamps are placed on the same horizontal line as the brake lamps and turn signal lamps, they shall be to the inside.

METAL TREATMENT

All metal used in construction of the bus body shall be zinc-coated or aluminum-coated or treated by an equivalent process before bus is constructed. Included are such items as structural members, inside and outside panels, door panels and floor sills. Excluded are such items as door handles, grab handles, interior decorative parts and other interior plated parts.

All metal parts that will be painted, in addition to the above requirements, shall be chemically cleaned, etched, zinc phosphate-coated and zinc chromate-or epoxy-primed, or the metal may be conditioned by an equivalent process.

In providing for these requirements, particular attention shall be given to lapped surfaces, welded connections of structural members, cut edges on punched or drilled hole areas in sheet metal, closed or box sections, unvented or undrained areas and surfaces subjected to abrasion during vehicle operation.

As evidence that the above requirements have been met, samples of materials and sections used in the construction of the bus body shall not lose more than 10 percent of material by weight when subjected to a 1,000-hour salt spray test as provided for in the latest revision of ASTM Standard B-117.

MIRRORS

The interior mirror shall be either clear view laminated glass or clear view glass bonded to a backing which retains the glass in the event of breakage. The mirror shall have rounded corners and protected edges. All Type A buses shall have a minimum of a six-inch x 16-inch mirror and Types B, C, and D buses shall have a minimum of a six-inch x 30-inch mirror.

Each school bus shall be equipped with exterior mirrors meeting the requirements of FMVSS No. 111. Mirrors shall be easily adjustable but shall be rigidly braced so as to reduce vibration.

Heated external mirrors may be used.

MOUNTING

The chassis frame shall support the rear body cross member. The bus body shall be attached to chassis frame at each main floor sill, except where chassis components interfere, in such a manner as to prevent shifting or separation of the body from the chassis under severe operating conditions.

Isolators shall be installed at all contact points between body and chassis frame on Types A-2, B, C, and D buses, and shall be secured by a positive means to the chassis frame or body to prevent shifting, separation, or displacement of the isolators under severe operating conditions.

OVERALL LENGTH

Overall length of bus shall not exceed 45 feet, excluding accessories.

OVERALL WIDTH

Overall width of bus shall not exceed 102 inches, excluding accessories.

PUBLIC ADDRESS SYSTEM

Buses may be equipped with AM/FM audio and/or public address system having interior or exterior speakers.

No internal speakers, other than the driver's communication systems, may be installed within four feet of the driver's seat back in its rearmost upright position.

REFLECTIVE MATERIAL (See National School Transportation Specifications & Procedures Placement of Reflective Markings)

The front and/or rear bumper may be marked diagonally 45 degrees down to centerline of pavement with two-inch $\pm \frac{1}{4}$ inch wide strips of non-contrasting reflective material.

The rear of bus body shall be marked with strips of reflective NSBY material to outline the perimeter of the back of the bus using material which conforms to the requirements of FMVSS No. 131, Table 1. The perimeter marking of rear emergency exits per FMVSS No. 217 and/or the use of reflective "SCHOOL BUS" signs partially accomplish the objective of this requirement. To complete the perimeter marking of the back of the bus, strips of at least one ³/₄ inch reflective NSBY material shall be applied horizontally above the rear windows and above the rear bumper, extending from the rear emergency exit perimeter, marking outward to the left and right rear corners of the bus. Vertical strips shall be applied at the corners connecting these horizontal strips.

"SCHOOL BUS" signs, if not of lighted design, shall be marked with reflective NSBY material comprising background for lettering of the front and/or rear "SCHOOL BUS" signs.

Sides of bus body shall be marked with at least one ³/₄ inch reflective NSBY material, extending the length of the bus body and located (vertically) between the floor line and the beltline.

Signs, if used, placed on the rear of the bus relating to school bus flashing signal lamps or railroad stop procedures may be of reflective NSBY material comprising background for lettering.

RUB RAILS

There shall be one rub rail located on each side of the bus approximately at seat cushion level which extends from the rear side of the entrance door completely around the bus body (except the emergency door or any maintenance access door) to the point of curvature near the outside cowl on the left side.

There shall be one additional rub rail located on each side at, or no more than ten inches above the floor line. The rub rail shall cover the same longitudinal area as upper rub rail, except at the wheelhousings, and it shall, at a minimum, extend to radii of the right and left rear corners.

Both rub rails shall be attached at each body post and all other upright structural members.

Each rub rail shall be four inches or more in width in their finished form, shall be constructed of 16-gauge steel or suitable material of equivalent strength and shall be constructed in corrugated or ribbed fashion. Each entire rub rail shall be black in color.

Both rub rails shall be applied outside the body or outside the body posts. Pressed-in or snap-on rub rails do not satisfy this requirement. For Type A-1 vehicles using the body provided by the chassis manufacturer or for Types A-2, B, C and D buses using the rear luggage or the rear engine compartment, rub rails need not extend around the rear corners.

There shall be a rub rail or equivalent bracing located horizontally at the bottom edge of the body side skirts.

SEATS AND RESTRAINING BARRIERS

Passenger Seating:

All seats shall have a minimum cushion depth of 15 inches and must comply with all requirements of FMVSS No. 222. School bus design capacities shall be in accordance with 49 CFR, Part 571.3 and FMVSS No. 222.

All restraining barriers and passenger seats may be constructed with non-reimbursable materials that enable them to meet the criteria contained in the School Bus Seat Upholstery Fire Block Test (National School Transportation Specifications & Procedures School Bus Seat Upholstery Fire Block Test).

Each seat leg shall be secured to the floor by a minimum of two bolts, washers, and nuts. Flange-head nuts may be used in lieu of nuts and washers, or seats may be track-mounted in conformance with FMVSS No. 222. If track seating is installed, the manufacturer shall supply minimum and maximum seat spacing dimensions applicable to the bus, which comply with FMVSS No. 222. This information shall be on a label permanently affixed to the inside passenger compartment of the bus.

All seat frames attached to the seat rail shall be fastened with two bolts, washers and nuts or flange-head nuts.

All school buses (including Type A) shall be equipped with restraining barriers which conform to FMVSS No. 222.

The use of a "flip seat" adjacent to any side emergency door is prohibited.

Pre School Age Seating:

When installed, all passenger seats designed to accommodate a child or infant carrier seat shall comply with FMVSS No. 225. These seats shall be in compliance with NHTSA's "Guideline for the Safe Transportation of Pre-school Age Children in School Buses".

Driver Seat:

The driver's seat supplied by the body company shall be a high back seat with a minimum seat back adjustable to 15 degrees, without requiring the use of tools, and a head restraint to accommodate a 95th percentile adult male, as defined in FMVSS No. 208. The driver's seat positioning and range of adjustments shall be designed to accommodate comfortable actuation of the foot control pedals by 95% of the adult male/female population. If installed, a driver's suspension seat must be one of three types: air, hydraulic or spring. A pedestal-type seat with a

center spring is not considered a suspension seat. The driver's seat shall be secured with nuts, bolts and washers or flanged-head nuts.

Type A buses may use the standard driver's seat provided by the chassis manufacturer.

Driver Restraint System:

A Type 2 lap/shoulder belt shall be provided for the driver. The assembly shall be equipped with an automatic locking retractor for the continuous belt system. On all buses except Type A equipped with a standard chassis manufacturer's driver's seat, the lap portion of the belt system shall be guided or anchored to prevent the driver from sliding sideways under it. The lap/shoulder belt shall be designed to allow for easy adjustment in order to fit properly and to effectively protect drivers varying in size from 5th percentile adult female to 95th percentile adult male.

All buses shall be equipped with a seat belt cutting device secured in a location that is easily accessible to the driver while properly belted. The belt cutter shall be durable and designed to eliminate the possibility of the operator or others being cut during use.

STEERING WHEEL

See Chassis section.

STEPS

The first step at service door shall be not less than ten inches and not more than 14 inches from the ground when measured from top surface of the step to the ground, based on standard chassis specifications, except that on Type D vehicles, the first step at the service door shall be 12 inches to 16 inches from the ground. On chassis modifications which may result in increased ground clearance (such as four-wheel drive) an auxiliary step shall be provided to compensate for the increase in ground-to-first-step clearance. The auxiliary step is not required to be enclosed.

Step risers shall not exceed a height of ten inches. When plywood is used on a steel floor or step, the riser height may be increased by the thickness of the plywood.

OEM steps shall be enclosed to prevent accumulation of ice and snow.

OEM, retrofit, or after-market steps shall not protrude beyond the side body line, except during the loading or unloading of passengers.

STEP TREADS

All steps, including the floor line platform area, shall be covered with 3/16 inch rubber floor covering or other materials equal in wear and abrasion resistance to top grade rubber.

The metal back of the tread shall be permanently bonded to the step tread material.

Steps, including the floor line platform area, shall have a one ½ inch nosing that contrasts in color by at least 70 percent measured in accordance with the contrasting color specification in 36 CFR, Part 1192 ADA, Accessibility Guidelines for Transportation Vehicles.

Step treads shall have the following characteristics:

Special compounding for good abrasion resistance and coefficient of friction of at least 0.6 for the step surface, and 0.8 for the step nosing.

Flexibility so that it can be bent around a ½" mandrel both at 130 degrees Fahrenheit and 20 degrees Fahrenheit without breaking, cracking, or crazing.

A durometer hardness 85 to 95.

STIRRUP STEPS

When the windshield and lamps are not easily accessible from the ground, there may be at least one folding stirrup step or recessed foothold and suitably located handles on each side of the front of the body for easy accessibility for cleaning. Steps are permitted in or on the front bumper in lieu of the stirrup steps, if the windshield and lamps are easily accessible for cleaning from that position.

STOP SIGNAL ARM

The stop signal arm(s) shall comply with the requirements of FMVSS No. 131.

STORAGE COMPARTMENT (OPTIONAL)

A storage container for tools, tire chains, and/or tow chains may be located either inside or outside the passenger compartment. If inside, it shall have a cover capable of being securely latched and fastened to the floor (the seat cushion may not serve this purpose), convenient to either the service door or the emergency door.

SUN SHIELD

An interior adjustable transparent sun shield, with a finished edge and not less than six inches by 30 inches for Types B, C, and D vehicles, shall be installed in a position convenient for use by the driver.

On all Type A buses, the sun shield (visor) shall be installed according to the manufacturer's standard.

TAILPIPE

The tailpipe may be flush with, but shall not extend out more than two inches beyond, the perimeter of the body for side-exit pipe or the bumper for rear-exit pipe.

The tailpipe shall exit to the left or right of the emergency exit door in the rear of vehicle or to the left side of the bus in front or behind the rear drive axle. The tailpipe exit location on school bus types A-1 or B-1 buses may be according to the manufacturer's standard. The tailpipe shall not exit beneath any fuel filler location or beneath any emergency door.

TOW ATTACHMENT POINTS

Towing devices shall be furnished on the rear and attached so they do not project beyond the rear bumper. Towing devices for attachment to the rear of the chassis frame shall be furnished by either the chassis or body manufacturer. The installation shall be in accordance with the chassis manufacturer's specifications.

TRACTION ASSISTING DEVICES (OPTIONAL)

Where required or used, sanders shall:

Be of hopper cartridge-valve type.

Have a metal hopper with all interior surfaces treated to prevent condensation of moisture.

Be of at least 100 pound (grit) capacity.

Have a cover on the filler opening of hopper, which screws into place, thereby sealing the unit airtight.

Have discharge tubes extending to the front of each rear wheel under the fender.

Have non-clogging discharge tubes with slush-proof, non-freezing rubber nozzles.

Be operated by an electric switch with a telltale pilot light mounted on the instrument panel.

Be exclusively driver-controlled.

Have a gauge to indicate that the hopper needs refilling when it reaches one-quarter full.

Automatic traction chains may be installed.

TRASH CONTAINER AND HOLDING DEVICE (OPTIONAL)

Where requested or used, the trash container shall be secured by a holding device that is designed to prevent movement and to allow easy removal and replacement; and it shall be

installed in an accessible location in the driver's compartment, not obstructing passenger use of the service door or the entrance grab handle, and in such a way as to prevent the entanglement of clothing, backpack straps, drawstrings, etc.

UNDERCOATING

The entire underside of the bus body, including floor sections, cross member and below floor line side panels, shall be coated with rust-proofing material for which the material manufacturer has issued a notarized certification of compliance to the bus body builder that materials meet or exceed all performance and qualitative requirements of paragraph 3.4 of Federal Specification TT-C-520b, using modified test procedures* for the following requirements:

Salt spray resistance-pass test modified to 5 percent salt and 1000 hours

Abrasion resistance-pass

Fire resistance-pass

*Test panels are to be prepared in accordance with paragraph 4.6.12 of TT-C-520b with modified procedure requiring that test be made on a 48-hour air-cured film at thickness recommended by compound manufacturer.

The undercoating material shall be applied with suitable airless or conventional spray equipment to the recommended film thickness and shall show no evidence of voids in the cured film.

VENTILATION

Auxiliary fans shall meet the following requirements:

Fans for left and right sides shall be placed in a location where they can be adjusted for maximum effectiveness and where they do not obstruct vision to any mirror or through any critical windshield area. Note: Type A buses may be equipped with one fan.

Fans shall be of six inch nominal diameter.

Fan blades shall be covered with a protective cage. Each fan shall be controlled by a separate switch.

The bus body shall be equipped with a suitably controlled ventilating system of sufficient capacity to maintain proper quantity of air under operating conditions without having to open windows except in extremely warm weather.

Static-type, non-closeable exhaust ventilation shall be installed in a low-pressure area of the roof.

Roof hatches designed to provide ventilation in all types of exterior weather conditions may be provided.

WHEELHOUSING

The wheelhousing opening shall allow for easy tire removal and service.

The wheelhousings shall be attached to floor sheets in such a manner so as to prevent any dust, water or fumes from entering the body. The wheelhousings shall be constructed of at least 16-gauge steel.

The inside height of the wheelhousing above the floor line shall not exceed 12 inches.

The wheelhousings shall provide clearance for installation and use of tire chains on single and dual (if so equipped) power-driving wheels.

No part of a raised wheelhousing shall extend into the emergency door opening.

WINDOWS

Each full side window, other than emergency exits designated to comply with FMVSS 217, shall provide an unobstructed opening of at least nine inches but not more than 13 inches high and at least 22 inches wide, obtained by lowering the window. One side window on each side of the bus may be less than 22 inches wide.

Optional tinted (<u>non-reimbursable</u>) and/or frost-free glazing may be installed in all doors, windows, and windshields consistent with federal, state, and local regulations.

WINDSHIELD WASHERS

A windshield washer system shall be provided.

WINDSHIELD WIPERS

A two-speed or variable speed windshield wiping system with an intermittent time delay feature, shall be provided.

The wipers shall be operated by one or more air or electric motors of sufficient power to operate the wipers. If one motor is used, the wipers shall work in tandem to give full sweep of windshield.

WIRING

All wiring shall conform to current SAE standards.

Wiring shall be arranged in circuits, as required, with each circuit protected by a fuse or circuit breaker. A system of color and number coding shall be used and an appropriate identifying diagram shall be provided to the end user, along with the wiring diagram provided by the chassis

manufacturer. The wiring diagrams shall be specific to the bus model supplied and shall include any changes to wiring made by the body manufacturer. Chassis wiring diagrams shall be supplied to the end user. A system of color and number-coding shall be used on buses. The following body interconnecting circuits shall be color-coded as noted:

<u>FUNCTION</u>	<u>COLOR</u>
Left Rear Directional Lamp	Yellow
Right Rear Directional Lamp	Dark Green
Stop Lamps	Red
Back-up Lamps	Blue
Tail Lamps	Brown
Ground	White
Ignition Feed, Primary Feed	Black

The color of cables shall correspond to SAE J 1128.

Wiring shall be arranged in at least six regular circuits as follows:

Head, tail, stop (brake) and instrument panel lamps

Clearance lamps and stepwell lamps that shall be actuated when the service door is open

Dome lamps

Ignition and emergency door signal

Turn signal lamps

Alternately flashing signal lamps

Any of the above combination circuits may be subdivided into additional independent circuits.

Heaters and defrosters shall be wired on an independent circuit.

Whenever possible, all other electrical functions (such as sanders and electric-type windshield wipers) shall be provided with independent and properly protected circuits.

Each body circuit shall be coded by number or letter on a diagram of circuits and shall be attached to the body in a readily accessible location.

The entire electrical system of the body shall be designed for the same voltage as the chassis on which the body is mounted.

All wiring shall have an amperage capacity exceeding the design load by at least 25 percent. All wiring splices are to be done at an accessible location and noted as splices on wiring diagram.

A body wiring diagram of a size that can be easily read shall be furnished with each bus body or affixed in an area convenient to the electrical accessory control panel.

The body power wire shall be attached to a special terminal on the chassis.

All wires passing through metal openings shall be protected by a grommet.

Wires not enclosed within the body shall be fastened securely at intervals of not more than 18 inches. All joints shall be soldered or joined by equally effective connectors, which shall be water-resistant and corrosion-resistant.

STANDARDS FOR SPECIALLY EQUIPPED SCHOOL BUSES

INTRODUCTION

Equipping buses to accommodate students with disabilities is dependent upon the needs of the passengers. While one bus may be fitted with a lift, another may have lap belts installed to secure child seats. Buses so equipped are not to be considered a separate class of school bus, but simply a regular school bus that is equipped for special accommodations.

The specifications in this section are intended to be supplementary to specifications in the chassis and body sections. In general, specially equipped buses shall meet all the requirements of the preceding sections plus those listed in this section. It is recognized by the entire industry that the field of special transportation is characterized by varied needs for individual cases and by a rapidly emerging technology for meeting those needs. A flexible, "common-sense" approach to the adoption and enforcement of specifications for these vehicles, therefore, is prudent.

As defined by the Code of Federal Regulations (CFR) 49§571.3, "Bus means a motor vehicle with motive power, except a trailer, designed for carrying more than ten persons" (eleven or more including the driver). This definition also embraces the more specific category, school bus. Vehicles with ten or fewer passenger positions (including the driver) cannot be classified as buses. For this reason, the federal vehicle classification multipurpose passenger vehicle (CFR 49§571.3), or MPV, must be used by manufacturers for these vehicles in lieu of the classification school bus. This classification system does not preclude state or local agencies or the National School Transportation Specifications & Procedures from requiring compliance of school bustype MPVs with the more stringent federal standards for school buses. The following specifications address modifications as they pertain to school buses that, with standard seating arrangements prior to modifications, would accommodate eleven or more including the driver. If by addition of a power lift, mobile seating device positions or other modifications, the capacity is reduced such that vehicles become MPVs, the intent of these standards is to require these vehicles to meet the same standards they would have had to meet prior to such modifications, and such MPVs are included in all references to school buses and requirements for school buses which follow.

DEFINITION

A specially equipped school bus is any school bus that is designed, equipped, or modified to accommodate students with special needs.

GENERAL REQUIREMENTS

School buses designed for transporting students with special transportation needs shall comply with Standards for Idaho School Buses and Operations and with Federal Motor Vehicle Safety Standards (FMVSS) applicable to their Gross Vehicle Weight Rating (GVWR) category.

Any school bus to be used for the transportation of children who are confined to a wheelchair or other mobile positioning device, or who require life-support equipment that prohibits use of the regular service entrance, shall be equipped with a power lift, unless a ramp is needed for unusual circumstances related to passenger needs.

AISLES

All school buses equipped with a power lift shall provide a minimum 30-inch aisle leading from any wheelchair/mobility aid position to at least one emergency exit door. A wheelchair securement position shall never be located directly in front of a power lift door location. It is understood that, when provided, the lift service door is considered an emergency exit.

COMMUNICATIONS

All school buses that are used to transport individuals with disabilities shall be equipped with a two-way electronic voice communication system other than CB radio.

GLAZING

Tinted glazing may be installed in all doors (<u>non-reimbursable</u>), windows (<u>non-reimbursable</u>), and windshields consistent with federal, state, and local regulations.

IDENTIFICATION

Buses with power lifts used for transporting individuals with disabilities shall display below the window line on the lift and rear doors the International Symbol of Accessibility. Such emblems shall be white on blue background, shall not exceed 12 inches by 12 inches or be less than 4 inches by 4 inches in size, and shall be of a high-intensity reflectorized material meeting Federal Highway Administration (FHWA) FP-85 Standards.

PASSENGER CAPACITY RATING

In determining the passenger capacity of a school bus for purposes other than actual passenger load (e.g., vehicle classification or various billing/reimbursement models), any location in a school bus intended for securement of an occupied wheelchair/mobility aid during vehicle operations are regarded as four designated seating positions. Similarly, each lift area may be regarded as four designated seating positions.

POWER LIFTS AND RAMPS

The power lift shall be located on the right side of the bus body when not extended. Exception: The lift may be located on the left side of the bus if, and only if, the bus is primarily used to deliver students to the left side of one-way streets.

A ramp device may be used in lieu of a mechanical lift if the ramp meets all the requirements of the Americans with Disabilities Act (ADA) as found in 36 CFR §1192.23 Vehicle ramp.

A ramp device that does not meet the specifications of ADA but does meet the specifications delineated below may be installed and used, when, and only when, a power lift system is not adequate to load and unload students having special and unique needs. A readily accessible ramp may be installed for emergency exit use. If stowed in the passenger compartment, the ramp must be properly secured and placed away from general passenger contact. It must not obstruct or restrict any aisle or exit while in its stowed or deployed position.

If a ramp is used, it shall be of sufficient strength and rigidity to support the special device, occupant, and attendant(s). It shall be equipped with a protective flange on each longitudinal side to keep the special device on the ramp.

Floor of the ramp shall be constructed of non-skid material.

Ramp shall be equipped with handles and shall be of weight and design to permit one person to put the ramp in place and return it to its storage place.

Ramps used for emergency evacuation purposes may be installed in raised floor buses by manufacturers

Ramps shall not be used as a substitute for a lift when a lift is capable of servicing the need.

All vehicles covered by this standard shall provide a level-change mechanism or boarding device (e.g., lift or ramp) with sufficient clearances to permit a wheelchair or other mobility aid user to reach a securement location.

The design load of the vehicle lift shall be at least 600 pounds. Working parts, such as cables, pulleys and shafts, which can be expected to wear, and upon which the vehicle lift depends for support of the load, shall have a safety factor of at least six, based on the ultimate strength of the material. Nonworking parts, such as platform, frame and attachment hardware that would not be expected to wear, shall have a safety factor of at least three, based on the ultimate strength of the material.

The vehicle lift lifting mechanism and platform shall be capable of lifting at least 800 pounds.

Vehicle lift controls shall be provided that enable the operator to activate the lift mechanism from either inside or outside the bus. The controls may be interlocked with the vehicle brakes, transmission or door, or may provide other appropriate mechanisms or systems to ensure the vehicle cannot be moved when the lift is not stowed and so the lift cannot be deployed unless the interlocks or systems are engaged. The lift shall deploy to all levels (e.g., ground, curb, and intermediate positions) normally encountered in the operating environment. Where provided, each control for deploying, lowering, raising and stowing the lift and lowering the roll-off barrier shall be of a momentary contact type requiring continuous manual pressure by the operator and shall not allow improper lift sequencing when the lift platform is occupied. The controls shall

allow reversal of the lift operation sequence, such as raising or lowering a platform that is part way down, without allowing an occupied platform to fold or retract into the stowed position.

Exception: Where the lift is designed to deploy with its long dimension parallel to the vehicle axis which pivots into or out of the vehicle while occupied (i.e., "rotary lift"), the requirements of, prohibiting the lift from being stowed while occupied, shall not apply if the stowed position is within the passenger compartment and the lift is intended to be stowed while occupied.

The vehicle lift shall incorporate an emergency method of deploying, lowering to ground level with a lift occupant, and raising and stowing the empty lift if the power to the lift fails. No emergency method, manual or otherwise, shall be capable of being operated in a manner that could be hazardous to the lift occupant or to the operator when operated according to the manufacturer's instructions and shall not permit the platform to be stowed or folded when occupied, unless the lift is a rotary lift and is intended to be stowed while occupied. No manual emergency operation shall require more than two minutes to lower an occupied wheelchair to ground level.

Vehicle lift platforms stowed in a vertical position, and deployed platforms when occupied, shall have provisions to prevent their deploying, falling, or folding any faster than 12 inches per second or their dropping of an occupant in the event of a single failure of any load carrying component.

The vehicle lift platform shall be equipped with barriers to prevent any of the wheels of a wheelchair or mobility aid from rolling off the platform during its operation. A movable barrier or inherent design feature shall prevent a wheelchair or mobility aid from rolling off the edge closest to the vehicle until the platform is in its fully raised position. Each side of the lift platform that extends beyond the vehicle in its raised position shall have a barrier with a minimum height of 1½ inch. Such barriers shall not interfere with maneuvering into or out of the aisle. The loading-edge barrier (outer barrier), which functions as a loading ramp when the lift is at ground level, shall be sufficient when raised or closed, or a supplementary system shall be provided, to prevent a power wheelchair or mobility aid from riding over or defeating it. The outer barrier of the lift shall automatically raise or close, or a supplementary system shall automatically engage, and remain raised, closed or engaged at all times that the platform is more than three inches above the roadway or sidewalk and the platform is occupied. Alternatively, a barrier or system may be raised, lowered, opened, closed, engaged or disengaged by the lift operator, provided an interlock or inherent design feature prevents the lift from rising unless the barrier is raised or closed or the supplementary system is engaged.

The vehicle lift platform surface shall be free of any protrusions over ¼ inch high and shall be slip resistant. The platform shall have a minimum clear width of 28½ inches at the platform, a minimum clear width of 30 inches measured from two inches above the platform surface to 30 inches above the surface of the platform, and a minimum clear length of 48 inches measured from two inches above the surface of the platform to 30 inches above the surface of the platform. (See National School Transportation Specifications & Procedures Wheelchair or Mobility Aid Envelope.)

Any vehicle lift platform openings between the platform surface and the raised barrier shall not exceed 5/8 inch in width. When the platform is at vehicle floor height with the inner barrier (if applicable) down or retracted, gaps between the forward lift platform edge and the vehicle floor shall not exceed ½ inch horizontally and 5/8 inch vertically. Platforms on semi-automatic lifts may have a handhold not exceeding 1½ inch by 4½ inch located between the edge barriers.

The vehicle lift outboard platform entrance ramp or loading-edge barrier used as a ramp and the transition plate from the inboard edge of the platform to the vehicle floor shall not exceed a slope of 1:8, measured on level ground, for a maximum rise of 3 inches, and the transition from roadway or sidewalk to ramp may be vertical without edge treatment up to ½ inch. Thresholds between ½ inch and ½ inch high shall be beveled with a slope no greater than 1:2.

The vehicle lift platform (not including the entrance ramp) shall not deflect more than three degrees (exclusive of vehicle roll or pitch) in any direction between its unloaded position and its position when loaded with 600 pounds applied through a 26 inches by 26 inches test pallet at the centroid of the platform.

No part of the vehicle lift platform shall move at a rate exceeding six inches per second while lowering and lifting an occupant, and shall not exceed 12 inches per second during deploying or stowing. This requirement does not apply to the deployment or stowage cycles of lifts that are manually deployed or stowed. The maximum platform horizontal and vertical acceleration when occupied shall be 0.3 g.

The vehicle lift shall permit both inboard and outboard facing of wheelchair and mobility aid users.

Vehicle lifts shall accommodate persons using walkers, crutches, canes or braces, or who otherwise have difficulty using steps. The platform may be marked to indicate a preferred standing position.

Platforms on vehicle lifts shall be equipped with handrails on two sides, which move in tandem with the lift, and which shall be graspable and provide support to standees throughout the entire lift operation. Handrails shall have a usable component at least eight inches long with the lowest portion a minimum of 30 inches above the platform and the highest portion a maximum of 38 inches above the platform. The handrails shall be capable of withstanding a force of 100 pounds concentrated at any point on the handrail without permanent deformation of the rail or its supporting structure. The handrail shall have a cross-sectional diameter between 1½ inch and 1½ inch or shall provide an equivalent grasping surface, and have eased edges with corner radii of not less than 1/8 inch. Handrails shall be placed to provide a minimum 1½ inches knuckle clearance from the nearest adjacent surface. Handrails shall not interfere with wheelchair or mobility aid maneuverability when entering or leaving the vehicle.

A resettable circuit breaker shall be installed between the power source and vehicle lift motor if electrical power is used. It shall be located as close to the power source as possible, but not within the passenger/driver compartment.

The vehicle lift design shall prevent excessive pressure that could damage the lift system when the platform is fully lowered or raised or that could jack the vehicle.

The following information shall be provided with each vehicle equipped with a vehicle lift:

A phone number where information can be obtained about installation, repair, and parts. (Detailed written instructions and a parts list shall be available upon request.)

Detailed instructions regarding use of the lift and readily visible when the lift door is open, including a diagram showing the proper placement and positioning of wheelchair/mobility aids on lift.

The vehicle lift manufacturer shall make available training materials to ensure the proper use and maintenance of the lift. These may include instructional videos, classroom curriculum, system test results or other related materials.

Each vehicle lift shall be permanently and legibly marked or shall incorporate a non-removable label or tag that states that it conforms to all applicable requirements of the current National School Transportation Specifications and Procedures. In addition, the lift manufacturer or an authorized representative, upon request of the original titled purchaser, shall provide a notarized Certificate of Conformance, either original or photocopied, which states that the lift system meets all the applicable requirements of the current National School Transportation Specifications and Procedures.

REGULAR SERVICE ENTRANCE

On power lift-equipped vehicles, the bottom step shall be the full width of the stepwell, excluding the thickness of the doors in open position.

A suitable device shall be provided to assist passengers during entry or egress. This device shall allow for easy grasping or holding and shall have no openings or pinch points that might entangle clothing, accessories or limbs.

RESTRAINING DEVICES

On power lift-equipped vehicles, seat frames may be equipped with attachments or devices to which belts, restraining harnesses or other devices may be attached. Attachment framework or anchorage devices, if installed, shall conform to FMVSS No. 210.

Belt assemblies, if installed, shall conform to FMVSS No. 209.

Child restraint systems, which are used to facilitate the transportation of children who in other modes of transportation would be required to use a child, infant, or booster seat, shall conform to FMVSS No. 213.

SEATING ARRANGEMENTS

Flexibility in seat spacing to accommodate special devices shall be permitted to meet passenger requirements. All seating shall be forward-facing.

SECUREMENT AND RESTRAINT SYSTEM FOR WHEELCHAIR/MOBILITY AID AND OCCUPANT

For purposes of better understanding the various aspects and components of this section, the term *securement* or phrase *securement system* is used exclusively in reference to the device(s) that secures the wheelchair/mobility aid. The term *restraint* or phrase *restraint system* is used exclusively in reference to the device(s) used to restrain the occupant of the wheelchair/mobility aid. The phrase *securement and restraint system* is used to refer to the total system that secures and restrains both the wheelchair/mobility aid and the occupant.

Securement and Restraint System – general:

The Wheelchair/Mobility Aid Securement and Occupant Restraint System shall be designed, installed and operated to accommodate passengers in a forward-facing orientation within the bus and shall comply with all applicable requirements of FMVSS No. 222. Gurney-type devices shall be secured parallel to the side of the bus.

The securement and restraint system, including the system track, floor plates, pockets, or other anchorages shall be provided by the same manufacturer or shall be certified to be compatible by manufacturers of all equipment/systems used.

When a wheelchair/mobility aid securement device and an occupant restraint share a common anchorage, including occupant restraint designs that attach the occupant restraint to the securement device or the wheelchair/mobility aid, the anchorage shall be capable of withstanding the loads of both the securement device and the occupant restraint applied simultaneously, in accordance with FMVSS No. 222. (See Wheelchair/mobility Aid Securement System and Occupant Restraint System of this section.)

When a wheelchair/mobility aid securement device (webbing or strap assembly) is shared with an occupant restraint, the wheelchair/mobility aid securement device (webbing or strap assembly) shall be capable of withstanding a force twice the amount as specified in §4.4(a) of FMVSS No. 209. (See Wheelchair/mobility Aid Securement System and Occupant Restraint System of this section.)

The bus body floor and sidewall structures where the securement and restraint system anchorages are attached shall have equal or greater strength than the load requirements of the system(s) being installed.

The occupant restraint system shall be designed to be attached to the bus body either directly or in combination with the wheelchair/mobility aid securement system, by a method which prohibits the transfer of weight or force from the wheelchair/mobility aid to the occupant in the event of an impact.

When an occupied wheelchair/mobility aid is secured in accordance with the manufacturer's instructions, the securement and restraint system shall limit the movement of the occupied wheelchair/mobility aid to no more than ½ inch in any direction under normal driving conditions.

The securement and restraint system shall incorporate an identification scheme that will allow for the easy identification of the various components and their functions. It shall consist of one of the following, or combination thereof:

The wheelchair/mobility aid securement (webbing or strap assemblies) and the occupant restraint belt assemblies shall be of contrasting color or color shade.

The wheelchair/mobility aid securement device (webbing or strap assemblies) and occupant restraint belt assemblies may be clearly marked to indicate the proper wheelchair orientation in the vehicle, and the name and location for each device or belt assembly, i.e., front, rear, lap belt, shoulder belt, etc.

All attachment or coupling devices designed to be connected or disconnected frequently shall be accessible and operable without the use of tools or other mechanical assistance.

All securement and restraint system hardware and components shall be free of sharp or jagged areas and shall be of a non-corrosive material or treated to resist corrosion in accordance with §4.3(a) of FMVSS No. 209.

The securement and restraint system shall be located and installed such that when an occupied wheelchair/mobility aid is secured, it does not block access to the lift door.

A device for storage of the securement and restraint system shall be provided. When the system is not in use, the storage device shall allow for clean storage of the system, shall keep the system securely contained within the passenger compartment, shall provide reasonable protection from vandalism and shall enable the system to be readily accessed for use.

The entire securement and restraint system, including the storage device, shall meet the flammability standards established in FMVSS No. 302.

Each securement device (webbing or strap assembly) and restraint belt assembly shall be permanently and legibly marked or shall incorporate a non-removable label or tag that states that it conforms to all applicable FMVSS requirements, as well as the current National School Transportation Specification and Procedures. In addition, the system manufacturer, or an authorized representative, upon request by the original titled purchaser, shall provide a notarized Certificate of Conformance, either original or photocopied, which states that the wheelchair/mobility aid securement and occupants' restraint system meets all requirements as specified in FMVSS No. 222 and the current National School Transportation Specifications and Procedures.

The following information shall be provided with each vehicle equipped with a securement and restraint system:

A phone number where information can be obtained about installation, repair, and parts. (Detailed written instructions and a parts list shall be available upon request.)

Detailed instructions regarding use, including a diagram showing the proper placement of the wheelchair/mobility aids and positioning of securement devices and occupant restraints, including correct belt angles.

The system manufacturer shall make available training materials to ensure the proper use and maintenance of the wheelchair/mobility aid securement and occupant restraint system. These may include instructional videos, classroom curriculum, system test results or other related materials.

Wheelchair/mobility Aid Securement System:

Each location for the securement of a wheelchair/mobility aid shall have a minimum of four anchorage points. A minimum of two anchorage points shall be located in front of the wheelchair/mobility aid and a minimum of two anchorage points shall be located in the rear. The securement anchorages shall be attached to the floor of the vehicle and shall not interfere with passenger movement or present any hazardous condition.

Each securement system location shall have a minimum clear floor area of 30 inches by 48 inches. Additional floor area may be required for some applications. Low profile heaters are not allowed within the clear floor area required to accommodate a wheelchair. Consultation between the user and the manufacturer is recommended to ensure that an adequate area is provided.

The securement system shall secure common wheelchair/mobility aids and shall be able to be attached easily by a person having average dexterity and who is familiar with the system and wheelchair/mobility aid.

As installed, each securement anchorage shall be capable of withstanding a minimum force of 3,000 pounds when applied as specified in FMVSS No. 222. When more than one securement device shares a common anchorage, the anchorage shall be capable of withstanding the force indicated above, multiplied by the number of securement devices sharing that anchorage.

Each securement device, if incorporating webbing or a strap assembly, shall comply with the requirements for Type 1 lap belt systems, in accordance with §4.2, §4.3, and §4.4(a) of FMVSS No. 209.

The securement system shall secure the wheelchair/mobility aid in such a manner that the attachments or coupling hardware will not become detached when any wheelchair/mobility aid component deforms, when one or more tires deflate, and without intentional operation of a release mechanism (e.g., a spring clip on a securement hook).

Each securement device (webbing or strap assembly) shall be capable of withstanding a minimum force of 2,500 pounds when tested in accordance with FMVSS No. 209.

Each securement device (webbing or strap assembly) shall provide a means of adjustment, per the manufacturer's design, to remove slack from the device or assembly.

Occupant Restraint System:

A Type 2 lap/shoulder belt restraint system that meets all applicable requirements of FMVSS Nos. 209 and 210 shall provide for restraint of the occupant.

The occupant restraint system shall be made of materials that do not stain, soil or tear an occupant's clothing, and shall be resistant to water damage and fraying.

Each restraint system location shall have not less than one anchorage of manufacturer's design for the upper end of the upper torso restraint. The anchorage for each occupant's upper torso restraint shall be capable of withstanding a minimum force of 1,500 pounds when applied as specified in FMVSS No. 222.

Each wheelchair/mobility aid location shall have not less than two floor anchorages for the occupant pelvic restraint and the connected upper torso restraint.

Each floor anchorage shall be capable of withstanding a minimum force of 3,000 pounds when applied as specified in FMVSS No. 222.

When more than one occupant restraint share a common anchorage, the anchorage shall be capable of withstanding a minimum force of 3,000 pounds multiplied by the number of occupant restraints sharing the common anchorage in accordance with FMVSS No. 222.

Each floor and wall anchorage that secures the occupant restraint to the vehicle which is not permanently attached, shall be of a "positive latch" design and shall not allow for any accidental disconnection.

Dynamic Testing:

The wheelchair/mobility aid securement and occupant restraint system shall be subjected to, and successfully pass, a dynamic sled test at a minimum impact speed/deceleration of 30 mph/20g's.

The dynamic test shall be performed by experienced personnel using an impact simulator with proven ability to provide reliable and accurate test results that can be replicated.

The dynamic test shall be performed in accordance with the procedures set forth in Appendix A of SAE J2249, i.e., "Test for Frontal Impact Crashworthiness." (National School Transportation Specifications & Procedures Test for Frontal Impact Crashworthiness.

The wheelchair/mobility aid used for testing purposes shall be a rigid, reusable surrogate wheelchair that complies with the requirements of National School Transportation Specifications & Procedures "Specification for Surrogate Wheelchair," and SAE J2252.

The dynamic test shall be performed using system assemblies, components and attaching hardware that are identical to the final installation in type, configuration and positioning. The body structure at the anchorage points may be simulated for the purpose of the sled test.

When tested, the wheelchair/mobility aid securement and occupant restraint system shall pass the criteria specified in Section 6.2 of SAE J2249, "Performance Requirements of Frontal Sled Impact Test." Following is an abridged summary of the criteria presented in National School Transportation Specifications & Procedures Test for Frontal Impact Crashworthiness.

Retain the test dummy in the test wheelchair and on the test sled with the test wheelchair in an upright position.

Do not show any fragmentation or complete separation of any load carrying part.

Do not allow the horizontal excursions of the test dummy and the test wheelchair to exceed specified limits.

Prevent the test wheelchair from imposing forward loads on the test dummy.

Allow removal of the test dummy and the test wheelchair subsequent to the test without the use of tools.

SPECIAL LIGHT

Doorways in which lifts are installed shall have for use during lift operation a special light(s) providing a minimum of two foot-candles of illumination measured on the floor of the bus immediately adjacent to the lift and on the lift when deployed at the vehicle floor level and on the lift platform when deployed at ground level. Additional interior and/or exterior lights shall be provided to meet this requirement. These lights shall be separate from the vehicle dome lights and wired to be actuated whenever the lift door is open.

SPECIAL SERVICE ENTRANCE

Power lift-equipped buses shall have a special service entrance to accommodate the power lift.

Exception: If the lift is designed to operate within the regular service entrance, and is capable of stowing such that the regular service entrance is not blocked in any way, and that persons entering or exiting the bus are not impeded in any way, a special service entrance shall not be required.

The special service entrance and door shall be located on the right side of the bus and shall be designed so as not to obstruct the regular service entrance.

Exception: A special service entrance and door may be located on the left side of the bus if, and only if, the bus is used primarily to deliver students to the left side of one-way streets and its use is limited to that function.

The opening may extend below the floor through the bottom of the body skirt. If such an opening is used, reinforcements shall be installed at the front and rear of the floor opening to support the floor and give the same strength as other floor openings.

A drip molding shall be installed above the opening to effectively divert water from entrance.

Door posts and headers at the entrance shall be reinforced sufficiently to provide support and strength equivalent to the areas of the side of the bus not used for the special service entrance.

SPECIAL SERVICE ENTRANCE DOORS

A single door or double doors may be used for the special service entrance.

A single door shall be hinged to the forward side of the entrance unless doing so would obstruct the regular service entrance. If, due to the above condition, the door is hinged to the rearward side of the doorway, the door shall utilize a safety mechanism that will prevent the door from swinging open should the primary door latch fail. If double doors are used, the system shall be designed to prevent the door(s) from being blown open by the wind resistance created by the forward motion of the bus, and/or shall incorporate a safety mechanism to provide secondary protection should the primary latching mechanism(s) fail.

All doors shall have positive fastening devices to hold doors in the "open" position.

All doors shall be weather sealed.

When manually-operated dual doors are provided, the rear door shall have at least a one-point fastening device to the header. The forward-mounted door shall have at least three one-point fastening devices. One shall be to the header, one to the floor line of the body, and the other shall be into the rear door. The door and hinge mechanism shall be of a strength that is greater than or equivalent to the emergency exit door.

Door materials, panels and structural strength shall be equivalent to the conventional service and emergency doors. Color, rub rail extensions, lettering and other exterior features shall match adjacent sections of the body.

Each door shall have windows set in rubber that are visually similar in size and location to adjacent non-door windows. Glazing shall be of same type and tinting (if applicable) as standard fixed glass in other body locations.

Door(s) shall be equipped with a device that will actuate an audible or flashing signal located in the driver's compartment when door(s) is not securely closed and the ignition is in the "on" position.

A switch shall be installed so that the lifting mechanism will not operate when the lift platform door(s) is closed.

Special service entrance doors shall be equipped with padding at the top edge of the door opening. Padding shall be at least three inches wide and one inch thick and shall extend the full width of the door opening.

SUPPORT EQUIPMENT AND ACCESSORIES

Each bus which is set up to accommodate wheelchair/mobility aids or other assistive or restraint devices that utilize belts shall contain at least one belt cutter properly secured in a location within reach of the driver while belted into his/her driver's seat. The belt cutter shall be durable and designed to eliminate the possibility of the operator or others being cut during use.

Special equipment or supplies that are used on the bus for mobility assistance, health support or safety purposes shall meet any local, federal or engineering standards that may apply, including proper identification.

Equipment that may be used for these purposes includes, but is not limited to:

Wheelchairs and other mobile seating devices. (See section on Securement and Restraint System for Wheelchair/Mobility Aid and Occupant.)

Crutches, walkers, canes and other ambulating devices.

Medical support equipment, which may include respiratory devices such as oxygen bottles (which should be no larger than 22 cubic feet for liquid oxygen and 38 cubic feet for compressed gas) or ventilators. Tanks and valves should be located and positioned to protect them from direct sunlight, bus heater vents or other heat sources. Other equipment may include intravenous and fluid drainage apparatus.

All portable equipment and special accessory items, including the equipment listed above, shall be secured at the mounting location to withstand a pulling force of five times the weight of the item or shall be retained in an enclosed, latched compartment. The compartment shall be capable of withstanding forces applied to its interior equal to five times the weight of its contents without failure to the box's integrity and securement to the bus. Exception: If these standards provide specific requirements for securement of a particular type of equipment, the specific standard shall prevail (e.g., wheelchairs).

STANDARDS FOR ALTERNATIVE FUELS

INTRODUCTION

This section is designed to be used as an overview of the alternative fuels being utilized for school transportation. It is not designed to replace current applicable federal, state, manufacturing or safety specifications that may exceed requirements within this section. There may be advancements in engineering and improvements in equipment fabrication methods and operating practices that differ from those specifically called for in this section. Such deviations or improvements may provide safety and may meet the intent of, and be compatible with, this section. Entities wishing to purchase alternative fuel school buses should use this section only as a starting point. More detailed specifications, including specific design and performance criteria and safety specifications, should be researched by prospective purchasers of alternative-fuel school buses

GENERAL REQUIREMENTS

Alternative fuel school buses shall meet the following requirements:

Chassis shall meet all standards previously mentioned in BUS CHASSIS STANDARDS.

Chassis shall meet all applicable Federal Motor Vehicle Safety Standards (FMVSS).

The fuel system integrity shall meet the specified leakage performance standards when impacted by a moving contoured barrier in accordance with test conditions specified in FMVSS No. 301 or FMVSS No. 303, as applicable.

Original equipment manufacturers (OEMs) and conversion systems using compressed natural gas (CNG) shall comply with National Fire Protection Association (NFPA) Specification 52 A, "Compressed Natural Gas Vehicular Fuel Systems," in effect at the time of installation. Fuel systems using liquefied petroleum gas (LPG) shall comply with NFPA Specification 58 A, "Liquefied Petroleum Gases Engine Fuel Systems" in effect at the time of installation.

All alternative fuel buses shall be capable of traveling not less than 200 miles with a full load, except those powered by electricity shall be capable of traveling not less than 80 miles.

Natural gas-powered buses shall be equipped with an interior/exterior gas detection system. All natural gas-powered buses shall be equipped with an automatic or manual fire detection and suppression system.

All materials and assemblies used to transfer or store alternative fuels shall be installed outside the passenger/driver compartment.

All Types C and D buses using alternative fuels shall meet the same base requirements of BUS CHASSIS STANDARDS for Power and Grade Ability, i.e., at least one published net horsepower per each 185 pounds of Gross Vehicle Weight Rating (GVWR).

The total weight shall not exceed the GVWR when loaded to rated capacity.

The manufacturer supplying the alternative fuel equipment must provide the owner and operator with adequate training and certification in fueling procedures, scheduled maintenance, troubleshooting and repair of alternative fuel equipment.

All fueling equipment shall be designed specifically for fueling motor vehicles and shall be certified by the manufacturer as meeting all applicable federal, state and industry standards.

All on-board fuel supply containers shall meet all appropriate requirements of the American Society for Mechanical Engineering (ASME) code, DOT regulations or applicable FMVSSs and NFPA standards.

All fuel supply containers shall be securely mounted to withstand a static force of eight times their weight in any direction.

All safety devices that discharge to the atmosphere shall be vented to the outside of the vehicle. The discharge line from the safety relief valve on all school buses shall be located in a manner appropriate to the characteristics of the alternative fuel. Discharge lines shall not pass through the passenger compartment.

A positive quick-acting (½ turn) shut-off control valve shall be installed in each gaseous fuel supply line, as close as possible to the fuel supply containers. The valve controls shall be placed in a location easily operable from the exterior of the vehicle. The location of the valve control shall be clearly marked on the exterior surface of the bus.

An electrical grounding system shall be required for grounding of the fuel system during maintenance-related venting.

CHARACTERISTICS OF ALTERNATIVE FUELS

For the purpose of this section, alternative fuels refer to the specific fuels listed below. A brief description of each fuel is shown. (See National School Transportation Specifications & Procedures Alternative Fuels Comparison Chart)

Note: Two other more exotic fuels are being examined, hydrogen and solar power. These two energy sources are in their infancy as alternative fuels for motor vehicles and are not covered within the scope of this section.

Liquid Alternative Fuels:

Methanol, a liquid at normal ambient temperatures, is colorless, and is made primarily from natural gas or coal. Extensive experiments have been conducted with automobile and truck engines powered by methanol. There are a number of urban transit bus fleets currently using methanol. California has experience with methanol as an alternative fuel for school buses through their School Bus Demonstration Project. The findings clearly determined methanol fuel to be costly to operate and unreliable.

Ethanol is a distilled agricultural alcohol product that is a liquid and is colorless at normal ambient temperatures. Corn is the current primary grain source. It has many of the same characteristics as methanol. Currently, ethanol is used primarily in a mixture with gasoline, usually no more than 10% ethanol.

Clean diesel was one of the alternative fuels approved in the Clean Air Act Amendments of 1990. The first step to be undertaken was further refining to reduce sulfur content and hence the significant particulate emissions caused by the sulfur. Significant advancement in this process has resulted in the development of ultra-low sulfur content diesel fuel. Refinery techniques can now produce diesel fuel with a sulfur content below 15 parts per million (PPM). The availability of this fuel supports the installation of an advanced exhaust after-treatment device in the form of a continuously regenerating trap (CRT). This CRT technology reduces the exhaust particulate content by approximately 90 percent from currently mandated levels (to .005 grams/hp-hr) and the hydrocarbons to an unmeasurable level (to essentially zero). Further steps are being developed to add cetane boosters, which increase efficient combustion.

Biodiesel is a fuel manufactured from vegetable oils, recycled cooking greases, or animal fats. The term "biodiesel" refers to the pure fuel. Biodiesel blends, or BXX refers, to a fuel that is composed of XX% biodiesel and 1-XX% diesel fuel. The City of Seattle, for example, has been using B20 which is 20% biodiesel blended with 80% low sulfur diesel. B100 is pure biodiesel. The diesel fuel can be No. 1 or No. 2. Biodiesel and biodiesel blends should only be used in compression-ignition engines that are designed to be operated on diesel fuel as described in ASTM 975 or related military specifications. Biodiesel or blends should never be put into a gasoline engine. Biodiesel fuel can be used in compression-ignition engines in cars, trucks, construction equipment, boats, generators, and in most other applications where diesel is typically used. Biodiesel fuel is renewable, is domestically produced and is commercially available in all fifty (50) states. It provides similar performance to diesel, has high cetane, high lubricity, high flash point and is the safest of all fuels to store and handle. Biodiesel has the highest BTU content of any alternative fuel.

Reformulated gasoline is a specially blended fuel with the following properties: (1) lower vapor pressure that reduces evaporation during operation and refueling, and (2) more efficient combustion through the addition of high-octane oxygenates. Reformulated gasoline aromatic levels have been lowered, which provides less in the way of hydrocarbon tail pipe emissions.

Gaseous Alternative Fuels:

Natural gas is primarily methane as it comes from the well, and it burns quite cleanly in its unprocessed state. Natural gas has a higher ignition point (temperature) and a narrower

fuel/oxygen mixture combustion range than other fuels. Energy is consumed in processing natural gas to achieve sufficient vehicle storage (i.e., compression or cryogenic processes). (See Compressed Natural Gas and Liquid Natural Gas below.)

Compressed natural gas, or CNG, consists primarily of mixtures of hydrocarbon gases and vapors, consisting principally of methane (CH₄) in gaseous form, which is compressed for use as a vehicular fuel.

Liquid natural gas, or LNG, utilizes the same natural gas source (primarily methane) as CNG, but requires purification of the gas and cooling and storage below -260 degrees Fahrenheit to liquefy the natural gas. Converting natural gas to liquid form provides storage of a much greater amount on the vehicle than can be achieved in the gaseous state.

Propane, also known as Liquefied Petroleum Gas or LPG, is sometimes available directly from wells, but is normally produced as a by-product of the gasoline refining process. It has been used for a number of years in light-duty commercial vehicles in urban areas around the world.

Electric Power, or the use of electricity as a power source for school buses is an emerging technology that is under considerable research due to the potential for reduced overall emissions. Research is centering on ways to increase the capacity and reduce the weight of batteries, as well as improving the motors used to power the vehicles and the associated electronics. Recharging technology is also developing rapidly. Most of these efforts have the goals of improving the range and performance of electric vehicles, reducing their cost and addressing operational concerns, such as recharging.

SCHOOL BUS WITHDRAWAL FROM SERVICE STANDARDS

INTRODUCTION

The State Department of Education shall develop, maintain and periodically distribute out-of-service criteria (a matrix), the basis of which shall be the latest published document from the most recent National Conference on School Transportation. The Out-of-Service Matrix shall be subsequent to input from the Pupil Transportation Steering Committee and new school bus state inspectors, as needed. These standards are intended to ensure that all Idaho school buses are maintained in a safe manner. When inspection of a bus reveals a maintenance condition that is below an out-of-service standard it shall be the duty of the technician performing the inspection to remove the vehicle from service until the discrepancy has been corrected. These standards shall apply to both new and used buses and shall be the criteria used whenever an Idaho school bus is inspected. These standards are to be used whenever a 60-day, Annual or New School Bus Inspection is being performed by state inspectors or district, contractor, or outside contracted maintenance personnel. (33-1506, Idaho Code)

STANDARDS FOR PUPIL TRANSPORTATION OPERATIONS

ADMINISTRATION

In compliance with 33-1511, Idaho Code, the State Department of Education shall provide the following:

Leadership in the development of a comprehensive pupil transportation program for statewide application.

A state supervisor of pupil transportation with the staff and other resources necessary for optimal job performance.

A comprehensive school bus operator and school bus technician training program.

Visits to local districts to audit, inspect and evaluate transportation systems and provide direction as necessary.

Managing the state's pupil transportation program to include planning, budgeting, and forecasting requirements for the operation.

Collecting and analyzing statistical and financial data.

Developing, preparing and organizing manuals, handbooks and written training programs for pupil transportation personnel.

Providing consulting services and assistance to local districts as necessary.

WRITTEN POLICIES

In compliance with 33-1501 through 33-1512, Idaho Code, the local board of trustees will establish and adopt a set of written policies governing the pupil transportation system, including policies for disabled students. Contracting school districts shall ensure compliance to written policies by pupil transportation contractors. The district's written policies shall, at a minimum, include:

Pupil transportation operations, including participation in training programs for all transportation personnel.

The evaluation of school bus routes and the periodic evaluation of pupil transportation personnel. The transportation supervisor or the district's school bus driver trainer shall evaluate a minimum of once per year each route and each driver for the purpose of assessing driver performance and the safety of routes and bus stops (*National School Transportation Specifications & Procedures, Identification and Evaluation of School Bus Route and Hazard Marking Systems*). The time schedule for pickup and delivery of

children shall be followed as accurately as possible. Documentation of the driver and route evaluation shall be retained in the driver's personnel file. The State Department of Education shall develop and maintain model evaluation procedures and forms.

The investigation and reporting of accidents and other transportation problems. Drivers shall report all school bus crashes to local school authorities and the appropriate law enforcement agency in accordance with Title 49, Chapter 13 of Idaho Code. Subsequent to the accident or incident, a Uniform School Bus Accident/Injury or appropriate Incident Report Form shall be completed by the driver or transportation supervisor and submitted to the State Department of Education within fifteen (15) days.

Providing supervision of loading and unloading areas at or near schools during unloading and loading of school buses. School districts shall provide an adequate number of supervisors for the size of the loading area and number of students present and ensure close, continuous and interactive supervision whenever students and/or buses are present in the loading area.

Providing emergency training and periodic evacuation drills for students in accordance with National Highway Safety Program Guideline 17. Documentation of all evacuation drills shall be maintained for a period of three years by the school district in either a batch file or in the driver's individual file.

Promoting public understanding of, and support for, the school transportation program in general.

PERSONNEL QUALIFICATIONS AND TRAINING

In compliance with Federal Motor Carrier Safety Administration Regulations (Part 383) and 33-130, 33-1508 and 33-1509, Idaho Code, the local board of trustees/administration will establish and adopt a set of written prerequisite qualifications and job descriptions governing pupil transportation personnel, which shall, at a minimum, include:

Completion of an application form, which includes a personal and occupational history.

A satisfactory driving record as revealed through pre-employment and annual checks with the driver license division.

A satisfactory work history as verified through professional references.

The ability to manage resources, students and personnel necessary to achieve a desired objective.

School Bus Driver Training

All new school bus drivers will complete a prior-approved school bus driver training program, which shall include documented knowledge and skill tests, as well as ten (10) inclusive hours of

behind-the-wheel and/or route observation, before being allowed to drive a school bus loaded with students. As a support to school district personnel, the State Department of Education shall develop and maintain model classroom and behind-the-wheel training curricula incorporating nationally recognized driver training methods and resources. (Sections 33-1508; 33-1509; 33-1511, Idaho Code)

All experienced school bus drivers will complete at least ten (10) hours refresher school bus driver training each fiscal school year. At least three (3) hours of pre-service training shall be provided before school begins in the fall. In addition, at least three (3) in-service training sessions shall be provided during the school year utilizing, at a minimum, thirty (30) minute, topic specific and documented, training blocks.

School districts shall request documentation of all previous school bus driver training and driving experience, in accordance with Federal Motor Carrier Safety Administration CDL licensing requirements. Documentation of previous training, similar to State Board of Education training requirements, may be used to comply with new school bus driver training hours. Regardless of any previous out-of-district training, all newly hired school bus drivers shall have sufficient training provided by the hiring district or contractor, along with accompanying documentation, illustrating proficient school bus driving skills. If the district is unable to obtain documentation of previous school bus driver training, the individual shall complete the training requirements for new school bus drivers. If the applicant has gaps in excess of four years of ongoing school bus driving experience, the individual shall complete the training requirements for new school bus drivers.

Pupil Transportation Personnel File

Each district that operates or contracts pupil transportation services shall cause to have filed for each school bus driver, in a secure area with limited access, the following information: (33-1506, 33-1508 and 33-1509, Idaho Code)

Copy of original application to drive school bus.

Copy of current physical examination, along with any applicable waivers.

Historical record of all topic specific school bus driver training.

Copy of current commercial driver's license.

Copy of current permit to drive school bus.

Copy of annual driving record check in compliance with CDL licensing requirements. The district shall request annually a driving record check report from the Idaho Transportation Department, Motor Vehicles Division, for those individuals who are going to drive a school bus during the current fiscal school year.

Copy of all driver and route evaluations.

Pupil Transportation Maintenance and Service Personnel

Each district that operates or contracts pupil transportation services shall perform maintenance functions on a timely basis consistent with safe transportation and work environments. (33-1506, Idaho Code)

The SDE Pupil Transportation Section shall develop and maintain pupil transportation staffing guidelines designed to promote efficiency and cost containment. These guidelines shall be for informational purposes. School districts shall not be financially penalized when falling outside SDE staffing guidelines.

VEHICLE OPERATION

All school districts and school bus drivers must meet all operations and performance requirements in conformity with law and with rules and regulations of the Department of Law Enforcement and the State Board of Education (33-1508, Idaho Code). The Board of Trustees or its designee shall be responsible for delineating in writing vehicle operations and the duties of bus drivers, which shall, at a minimum, include:

The driver shall ensure the safe condition of the school bus by conducting an initial and thorough daily pre-trip school bus inspection. The district shall provide drivers with a pre-trip inspection form. The State Department of Education shall develop and maintain a model pre-trip inspection form using nationally recognized criteria for the school bus pre-trip inspection. Each subsequent trip shall require an additional pre-trip school bus inspection, which at a minimum shall ensure that all safety equipment is in working order, i.e., brakes, tires, lights, steering and horn. All defects shall be reported by the school bus driver.

A school bus shall be backed only as a last resort. Buses shall not back to turn around on a public roadway, unless the local board finds there is no alternative to backing buses on certain roads. The local board then, by official action, may allow backing of school buses on certain public roadways. (33-1502, Idaho Code)

No passenger shall be permitted to operate the school bus.

The school bus driver shall not allow guns or inflammable or explosive substances such as gasoline to be carried on a school bus. School districts shall develop policy identifying other perceived unsafe items prohibited from being transported in the passenger compartment of a school bus, such as skis, skateboards, large instruments, etc. Students are to only carry objects on to the bus that can fit safely within the seat compartment, preferably on the student's lap. The student shall not carry hazardous materials, objects, or potentially disruptive animals on the bus.

School bus drivers shall properly wear a seat belt whenever the bus is in motion.

School bus doors shall remain closed while the bus is in motion. No school bus shall start in motion before all passengers have been seated. The driver shall require each passenger on the bus to be seated in a manufacturer's school bus passenger seat. No student shall be allowed to stand while the bus is in motion.

School districts shall establish school bus stops in safe locations with at least one hundred (100) yards clear visibility in both directions, whenever possible, and at least forty (40) feet from intersections, whenever possible. No bus stop shall be established less than one and one-half (1 1/2) miles from the nearest appropriate school except when, in the judgment of the Board of Trustees, the age or health or safety of the pupil warrants. (Sections 33-1501 and 33-1502, Idaho Code)

All school buses shall stop to load/unload passengers at designated bus stops in accordance with the law (49-1422, Idaho Code). The State Department of Education shall maintain model student loading/unloading training curriculum, the basis of which shall be in conformity with nationally recognized procedures (*National School Transportation Specifications & Procedures*). The student shall not leave or board the bus at locations other than the assigned home stop or assigned school unless arrangements for doing so have been approved by appropriate authority.

School bus drivers shall load and unload from the right side of the roadway. School bus drivers shall not allow students to cross roadways having more than three (3) lanes for purposes of loading or unloading and shall only load or unload students who live on the right side of such a roadway, except at locations having easily accessible traffic control signals. (49-1422, Idaho Code)

When it is necessary for the student to cross the roadway, the driver shall require the student to cross ten (10) feet in front of the bus in accordance with state loading/unloading training curriculum.

School bus drivers shall report the license number of any vehicle, which violates any law endangering school children to his/her immediate supervisor (33-1509, Idaho Code).

A driver on a school bus route shall not leave an occupied bus. In case of a breakdown the driver shall request assistance via two-way communication whenever possible. Otherwise, the driver should ask a passing motorist to make contact with the district, send a school bus aide or at least two responsible students to make contact with the district, or wait for help.

Whenever it is necessary for the school bus driver to leave an unoccupied bus or leave the driver's seat, he/she shall shut off the motor, curb the wheels where appropriate, set the brakes and remove the ignition key.

All school and activity buses shall stop at all railroad grade crossings in accordance with the law (33-1508; 49-648 and 49-649 Idaho Codes). The State Department of Education shall develop and maintain railroad grade crossing training curriculum, the basis of which

shall be in conformity with nationally recognized procedures (*National School Transportation Specifications & Procedures*).

School districts shall limit on-duty and driving time of school bus drivers similar to the limitations imposed by the Federal Motor Carrier Safety Administration regulations for drivers of similar commercial motor vehicles. Drivers shall use FMCSA over-the-road hours-of-service trip logs, a trip agenda, or other trip documentation validating applicable driving hours on all out-of-district trips in excess of one-hundred (100) miles (FMCSA Regulations, Hours of Service of Drivers).

At no time shall a driver exceed sixty-five (65) miles per hour or a lesser posted speed limit.

PUPIL MANAGEMENT

Pupil transportation is another component in the school district's overall education program. An effective pupil transportation management program must have the support of the school district administration, school bus drivers, pupils, and parents. Each school district should institute a comprehensive pupil-management program that is designed to share the responsibility for pupil safety and well-being, as well as protecting the interests of all others involved in the program.

Every school district which operates a pupil transportation system shall have a written policy which sets forth the pupil's right to "due process" when disciplinary action is taken and defines the duties and responsibilities of students when taking advantage of pupil transportation. The school district's pupil transportation student management policy, including the duties and responsibilities of students, teachers and drivers shall be in concert with the district's written classroom policies. (33-512, Idaho Code)

The State Department of Education shall develop and maintain model student management guidelines, suggested rules and regulations in its school bus driver training curriculum.

STUDENT ELIGIBILITY

Eligible Students

Student eligibility for state funded pupil transportation services is defined in 33-1501 and 33-1502. Idaho Code.

A pupil with disabilities who's Individualized Education Plan (IEP) requires transportation is eligible for transportation as a related service (IDEA) under the Pupil Transportation Support Program regardless of distance from the school.

It is the aim of the State Department of Education, in keeping with the "inclusion" concept, to arrange transportation for the student with disabilities as closely as possible to that of the student without disabilities. Whenever possible, students with disabilities will ride with students without disabilities on regular routes.

Students who attend school at an alternate location as assigned by the local board of trustees may be expected to walk reasonable distances between schools (33-1501, Idaho Code). Transporting or shuttling students between schools or buildings in conjunction with non-reimbursable programs is a non-reimbursable expense and all such mileage shall be documented and tracked as non-reimbursable shuttle miles.

Ineligible Students

An ineligible student shall be defined as any properly enrolled public school student who does not otherwise meet ridership eligibility by virtue of distance, age, health, or safety.

If a school district allows ineligible but properly enrolled public school students on a bus and their presence does not create an appreciable increase in the cost of the bus run, as determined by the State Department of Education (in computing to and from school state allocations), the district shall not be penalized.

Ineligible students may ride existing bus runs, and to and from an existing bus stop, on a "space available" basis provided that neither time, mileage, or other appreciable cost is added as a result of this service

Non-Public (Private or Parochial) School Students

The cost of transporting non-public school students must be deducted when submitting the transportation reimbursement claim. Each school district must recover the full cost of transporting non-public school students, and in no event may that cost be determined to be zero (0). (Section 33-1501, Idaho Code)

Non-Student Rider

A non-student rider shall be defined as any transported person who is not properly enrolled in a pre-K through twelve school program. Each school district must recover the full cost of transporting non-students, except that dependent children of young mothers who are properly enrolled in a public school program, SDE pupil transportation staff, district supervisory personnel and/or administrators and aides may ride on to and from school bus routes. Other persons and teachers who have officially been appointed as chaperones may be allowed on a school bus for field and extracurricular trips. If the local district policy allows, exceptions may be made for passengers other than properly enrolled school students to ride the bus when special circumstances exist and space is available. An appropriate authority must give prior permission before non-students may ride. No eligible transported student is to be displaced or required to stand in order to make room for an ineligible, non-public, or non-student rider.

PUPIL TRANSPORTATION SUPPORT PROGRAM - FINANCIAL REPORTING

Each school district operates motor vehicles of many sizes and types, such as school buses, small and large trucks, cars for administration and driver education, pickups, delivery vans, and other miscellaneous small motor vehicles. All school district vehicle operating costs must be charged

to the appropriate individual account or accounts according to their use. Costs for transporting eligible students to and from school shall be accounted for separately in accordance with State Board of Education approved procedures. (33-1006, Idaho Code)

Accurate mileage records shall be kept for reimbursable and non-reimbursable programs so eligible and non-eligible miles can be accurately determined. No indirect costs are allowed. Financial supporting documents shall be maintained throughout the fiscal year for each program category for audit purposes.

Each school district that operates a school transportation system will maintain accurate records of operations including runs, run mileage, categorized bus mileage, student rider counts and other related costs on uniform record-keeping forms provided by the Department of Education. Information will be made available to the Department of Education for audit purposes upon request. Information will be compiled and retained for a minimum of four (4) years, including the current fiscal year, in the following areas: (Section 33-1006, Idaho Code)

Administrative and Program Operation Costs

The school district administrative reimbursement will be seven and one half percent (7.5%) of all approved reimbursable operation costs for transporting pupils except administration costs, depreciation, and contracted services, as reported to the State Department of Education on the Annual Pupil Transportation Claim for Reimbursement (Schedule B); or

Actual administrative costs, program operation costs, operation of plant, maintenance of plant, fixed costs, and other pupil transportation costs identified in 33-1006, Idaho Code, which are directly related, charged and reported as transportation costs to the State Department of Education on the Annual Pupil Transportation Claim for Reimbursement (Schedule A).

Districts will be permitted flexibility in scheduling bus routes; however, before-school and after-school activity or other program busing that results in duplicating transportation service to an area is not reimbursable, except that the Idaho Reading Initiative (IRI) shall be reimbursable under the Pupil Transportation Support Program. Transportation costs for other before-school and after-school academic programs may be reimbursable and will be considered on a case-by-case basis when specific requests are submitted to the State Department of Education on or before March 31 of the school year in which the busing began.

All academic and activity summer programs will be non-reimbursable under the Pupil Transportation Support Program, except transportation costs for Migrant Summer School, the Idaho Reading Initiative (IRI), and Extended School Year (ESY) Special Needs programs will be reimbursable.

The State Department of Education shall develop support staff (supervisor, driver trainer, secretary/dispatcher, etc.) and school bus inventory guidelines for pupil transportation operations.

The district will maintain accurate records of all bus routes and runs, including rider counts, mileage and other related operation and vehicle maintenance costs (33-1006, Idaho Code). A "route" is defined as anything one bus does during the morning (a.m. route), midday (noon route), or afternoon (p.m. route) and may be comprised of one or more morning, midday, or afternoon to –from school "run(s)." Annual ridership shall be calculated by taking rider counts a minimum of once per academic term and subsequently averaged.

If the local board of trustees authorizes the use of school buses to transport students to and from school-sponsored activities or field trips, the local board will use school buses that are in safe mechanical condition. No school bus shall be operated, loaded, or equipped in such a way as to constitute a hazard to the safety of the pupils being transported. School bus emergency egress systems shall remain operable and the bus aisle shall remain clear of obstruction while pupils are being transported. (33-1506, Idaho Code)

If the local board of trustees authorizes the use of non-conforming vehicles to transport students to and from school-sponsored activities or field trips, the local board will use vehicles that are in safe mechanical condition. No non-conforming vehicle shall be operated, loaded, or equipped in such a way as to constitute a hazard to the safety of the pupils being transported.

The district shall maintain accurate records of all trips in all school buses and non-conforming vehicles used in the transportation of students, including the purposes of the trip, mileage and operation and vehicle maintenance costs. An annual odometer reading will be taken at the end of each fiscal school year (June 30) on all district owned vehicles used in the transportation of pupils. The district shall reconcile annual mileage reports with all recorded reimbursable and non-reimbursable program miles. School districts that contract for pupil transportation services shall report all reimbursable and non-reimbursable program miles. The district shall maintain accurate mileage records of all trips in all district owned non-conforming vehicles used for shuttling school bus drivers to and from their school buses for purposes of efficiency and cost containment

Field trips will be reimbursable when they are approved school activities that are an integral part of the total education program, are class-curriculum driven, occur during the regular school year and extend not more than one hundred (100) miles beyond the boundaries of the state. Field trips that are for performance, social, recreational, competition, or reward purposes are not reimbursable, except that a local, non-competitive performance event (e.g., musical performance) shall be reimbursable. The costs of transporting athletes or students to and from extracurricular activities are not reimbursable.

The following activities which are under the jurisdiction and sponsorship of the Idaho High School Activities Association will not be reimbursable including, but not limited to: baseball, basketball, cross-country, debate, drama, drill team, football, golf, instrumental music, soccer, softball, speech, tennis, track, vocal music, volleyball, and wrestling. In addition to these, any other school activity that is scheduled and held for competition purposes is not reimbursable.

Safety Busing

All school districts submitting applications for new safety busing reimbursement approval shall establish a board policy for evaluating and rating all safety busing requests and shall have on file a completed measuring or rating instrument for all submitted requests. The State Department of Education staff shall develop and maintain a measuring instrument model, which shall include an element for validating contacts with responsible organizations or persons responsible for improving or minimizing hazardous conditions. Each applying district will be required to annually affirm that conditions of all prior approved safety busing requests are unchanged. The local board of trustees shall annually, by official action (33-1502, Idaho Code), approve all new safety busing locations. School districts that receive state reimbursement of costs associated with safety busing will re-evaluate all safety busing sites at intervals of at least every three years using the local board adopted measuring or scoring instrument. In order to qualify for reimbursement the local school board will, by official action, approve the initial safety busing request and allow the students in question to be transported before the application is sent to the state. Consideration for reimbursement will be contingent on the application for new safety busing being received by the State Department of Education Transportation Section on or before March 31 of the school year in which the safety busing began.

Contract For Transportation Services

Any district that contracts for pupil transportation services will have a copy of its current contract on file with the State Department of Education, Supervisor of Transportation Services (Section 33-1510, Idaho Code). The State Department of Education shall develop and maintain a model contract.

School districts that contract pupil transportation services will report actual contractual costs to the State Department of Education on the Annual Pupil Transportation Claim for Reimbursement (Schedule C). Specific costs related to district administrative salaries and benefits, purchased services, supplies, etc., embedded in the contract will be reported as non-reimbursable contract costs. The State Department of Education will consider specific district operational costs related to the transportation contract as reimbursable. Reimbursement of specific district operational costs normally reported on Schedule A or Schedule B that are embedded in the contract must receive prior approval.

School districts that contract pupil transportation services and also operate a district-owned pupil transportation program may submit specific costs related to district salaries benefits, purchased services, supplies, etc. (Schedule A or Schedule B) when the costs can be reconciled to district-owned and operated school buses.

Leasing District-Owned Buses

School districts will develop and use a policy approved by the local board of trustees delineating responsibility and use of rental or leased buses. Any costs to the district will not be reimbursable under the Transportation Support Program. A school district that allow a school bus to be operated by a non-district employee as part of a lease or rental agreement might not be insured under the terms of its insurance policy. Therefore, districts will maintain adequate liability insurance coverage on rented or leased buses and shall notify its insurance carrier when renting

or leasing a school bus and shall request written confirmation of continued insurance coverage during the particular circumstances of the rental or lease arrangement. Districts will maintain accurate records on all district-owned leased buses, including mileage, to whom leased and revenues received. (Section 33-1512, Idaho Code)

Ineligible Vehicles

Costs incurred when transporting pupils in any vehicle that does not meet all State Board of Education, state and federal standards for a school bus will not be reimbursable within the Transportation Support Program, except as permitted in 33-1006, Idaho Code.

Liability Insurance

Every policy, contract of insurance, or comprehensive liability plan for each contractor-owned school bus will provide that the insurance carrier pay on behalf of the insured local school district to a limit of no less than five hundred thousand dollars (\$500,000) per person limited to three million dollars (\$3,000,000) for bodily or personal injury, death, or property damage or loss as the result of any one (1) occurrence or accident, regardless of the number of persons injured or the number of claimants. (Section 33-1507, Idaho Code)

Every policy, contract of insurance, or comprehensive liability plan for each district-owned school bus will provide that the insurance carrier pay on behalf of the insured local school district to a limit of no less than five hundred thousand dollars (\$500,000) for bodily or personal injury, death, or property damage or loss as the result of any one (1) occurrence or accident, regardless of the number of persons injured or the number of claimants. (Sections 6-924 and 33-1507, Idaho Code)

Non-Traditional Educational Programs

Costs of transporting students for purposes of accessing alternate, special or unique educational programs outside normal school hours or outside the normal school year are not reimbursable. However, districts will not be financially penalized for incorporating the transportation of ineligible student riders into a reimbursable educational run when there is no subsequent appreciable increase in the allocation of transportation resources.

Capital Investment

Purchase of school buses with approved reimbursable options and two-way voice communication radios installed in a new bus will be the only capital investment items allowed in the reimbursement program. Reasonable cellular telephone basic service contract costs and reasonable repeater service contract costs are reimbursable. No more than two (2) basic cellular telephone service contracts will be allowed per school district. Reimbursement for basic cellular telephone service contract costs in excess of two (2) must have prior approval. Mobile cellular telephone, additional cellular airtime, roaming and long distance charges are non-reimbursable costs. The cost of a cellular telephone may be reimbursable when the cost is in-lieu of a hard-wired two-way voice radio.

Depreciation

The purchase date for purposes of depreciation is determined to be July 1 of the state fiscal year in which the bus is delivered. Buses will be placed on a depreciation schedule after they have been inspected by personnel from the State Department of Education. When a bus is sold or traded prior to its life expectancy according to the district's SDE generated depreciation schedule, the district shall forfeit an amount equal to total depreciation received, minus depreciation calculated at straight-line method, plus fifty-percent (50%) of the projected depreciation amount for the year in which the bus is sold or traded. (33-1006, Idaho Code)

Before any newly acquired school bus is used for transporting pupils it shall be inspected by a duly authorized representative of the State Department of Education. (33-1506, Idaho Code)

Depreciation Ineligibility

Any used school bus purchased by a district will not be eligible for depreciation if the bus is over five (5) years old, (using the body manufacturer's date). Used school buses new to the State no older than five (5) years will be placed on the district's depreciation schedule, using an accelerated declining balance method of calculating depreciation, which shall include a percentage rate equal to one (1), divided by the remaining years life expectancy of the bus (according to its life expectancy category), multiplied by two (2).

Standards

In order to be eligible for depreciation and operation costs a school bus must meet all federal and Idaho minimum construction standards and State Board of Education standards. Further, the bus shall be assigned and used daily on to and from school routes, except that new buses purchased for spare, activity and field trip purposes may be placed on the district's depreciation schedule if they are also used on to -from school routes. The maximum number of spare, activity and field trip buses (buses not consistently assigned to –from school routes) allowed for purposes of depreciation reimbursement will be one-tenth percent (0.001) of the district's average daily attendance (ADA) rounded up.

Retrofit Standards

Any vehicle that has been retrofitted to be used as a school bus will meet current Idaho minimum construction standards.

Any school bus that undergoes a partial retrofit will meet current Idaho minimum construction standards applicable to the retrofitted part(s).

Size Categories

All school buses will be categorized by size as follows: eighty-five (85) students and up, seventy-three to eighty-four (73-84) students, fifty-nine to seventy-two (59-72) students, forty-

seven to fifty-eight (47-58) students, thirty-five to forty-six (35-46) students, twenty to thirty-four (20-34) students, and one to nineteen (1-19) students.

Life Expectancy

For depreciation purposes, all school buses will be categorized according to their life expectancy as follows: ten-year (10) depreciation, twelve-year (12) depreciation, and fifteen-year (15) depreciation. Using construction data supplied by the manufacturers, the Department of Education will compile a list of buses each year that would fall into each of the three depreciation categories. Activity and lift-equipped buses will be categorized for purchase and depreciation purposes as if they had full seating capacity. The cost of the lift will not be included when calculating the high-low mean price of buses in each category; however, the cost of the lift will be included in the total cost for depreciation purposes. The cost of activity bus options (e.g., air conditioning, partially reclining passenger seats, interior overhead storage compartments, etc.) will not be included when calculating the high-low mean price of buses in each category and will not be included in the total cost for depreciation purposes. Beginning with buses purchased after July 1, 2002, the previous year high-low mean cost will be calculated for both gas- and diesel-powered buses according to size and life expectancy. Whenever the high-low mean in any category exceeds the high-low mean in the next higher category or whenever bus purchases in the category are fewer than three, the State Department of Education will adjust that category's high-low mean subsequent to national pricing trends and input from the Pupil Transportation Steering Committee. Buses will then be placed on the depreciation schedule with the cost of buses reimbursed up to one hundred ten percent (110%) of the category high-low mean for the previous year.

Ten-year (10) depreciation

The school bus depreciation schedule, within the allowable costs of the Pupil Transportation Support Program, for school buses with life expectancy of ten (10) years, that were purchased subsequent to July 1, 1992, will be determined by using an accelerated declining balance method for calculating depreciation (declining balance schedule to include a percentage rate of twenty percent (20%) per year for useful life expectancy of ten (10) years). (Section 33-1006, Idaho Code)

Twelve-year (12) depreciation

The school bus depreciation schedule within the allowable costs of the Pupil Transportation Support Program, for school buses with life expectancy of twelve (12) years, that were purchased subsequent to July 1, 1992, will be determined by using an accelerated declining balance method of calculating depreciation (declining balance schedule to include a percentage rate of sixteen and sixty-seven hundredths percent (16.67%) per year for useful life expectancy of twelve (12) years). (Section 33-1006, Idaho Code)

Fifteen-year (15) depreciation

The school bus depreciation schedule within the allowable costs of the Pupil Transportation Support Program, for school buses with life expectancy of fifteen (15) years that were purchased subsequent to July 1, 1992, will be determined by using an accelerated declining balance method of calculating depreciation (declining balance schedule to include a percentage rate of thirteen and thirty-three hundredths percent (13.33%) per year for useful life expectancy of fifteen (15) years). (Section 33-1006, Idaho Code)

Purchase Price

The purchase price of each bus will include the total chassis, body, special equipment, freight costs, pre-delivery inspection fees and any other costs directly related to acquiring the bus. Costs of non-reimbursable options will be subtracted for purposes of calculating the district's reimbursable bus depreciation. (33-1006; 33-1506, Idaho Code)

The purchase amount of the school bus that will be placed on the state depreciation schedule for purposes of reimbursement and calculation of the high-low mean will be the lowest bid quotation received from dealers who meet specifications as established by the local school district. Districts will provide verification of bid prices. Any or all bid quotations may be rejected by the school district; however, all bid prices will be evaluated and adjusted as necessary by the State Department of Education Pupil Transportation Section with recommendations for adjustment from the Pupil Transportation Steering Committee. The lowest responsive and responsible bid will be used in calculating the district's depreciation reimbursement. Verifiable differences in school bus construction quality may be justification for bid rejection.

School Bus Delivery Costs

FOB district bus delivery costs reflected in school district bid specifications and the subsequent vendor invoice will be considered part of the bus purchase price for purposes of depreciation reimbursement. Costs for transporting school buses from the body factory to the home school district by school district personnel while in the employ of the district will be calculated by using allowable mileage and meal rates established by the Idaho State Board of Examiners and will also include reasonable lodging rates and nights. District delivery costs, including reimbursable district personnel salaries, in excess of comparable dealer delivery costs are not reimbursable.

Districts will not report any new school bus delivery mileage on the Pupil Transportation Reimbursement Claim form. Districts will record the initial mileage on all new school buses delivered to the district and will track and record all subsequent mileage for purposes of reimbursement.

Nonreimbursable Costs

No finance charges, leases, rent, or interest will be included in the purchase price. These are not reimbursable costs on the depreciation schedule. A school district that leases a school bus on a short-term emergency basis must receive prior approval, for purposes of reimbursement.

Inoperable Bus

Any school bus that is wrecked, sold, inoperable, or for any other reason does not or cannot meet all federal, state and State Board of Education construction and operational standards will be removed from the depreciation schedule. Revenues received subsequent to an insurance claim, associated with any district owned vehicle that receives state pupil transportation reimbursement consideration, shall be reported on the pupil transportation reimbursement claim form.

Depreciation Account

All school bus depreciation revenue received by school districts from the state will be placed into a separate account and used only for the purchase of school buses. Any revenue received by the school district subsequent to the sale of any used school bus will be placed into a separate account and used only for the purchase of school buses. Trade-in values reflected in district bid specifications and subsequent invoicing will not be subtracted from the purchase price of the new bus for purposes of depreciation reimbursement.

COMMERCIAL COMPUTERIZED ROUTING AND SCHEDULING

Costs for commercial computerized routing and scheduling will be permitted within the allowable administrative costs when computing the Transportation Support Program as subject to approval of the State Department of Education Pupil Transportation Section. Specific requests by districts must be submitted in detail and approved prior to July 1 of the school year in which the service is to be provided. Consideration will be on a district by district basis. Ineffective or non-productive use of computerized routing and scheduling software, as determined by the State Department of Education, may result in non-reimbursement of related costs. Access to "read-only" files by SDE pupil transportation staff for purposes of evaluating effectiveness of software will be an element in determining annual reimbursement approval.

REIMBURSEMENT/NON-REIMBURSEMENT MATRIX

The State Department of Education will, as a matter of policy, periodically publish and distribute a reimbursement matrix.

D. SUBJECT:

Proposal to Rezone School District

BACKGROUND:

Idaho Code 33-313 states that following the release of the decennial census data each school district board of trustees shall prepare a proposal to equalize the population of their trustee zones. It also states that the boundaries of the trustee zones in each school district shall be defined and drawn so that, as reasonably as may be, each such zone shall have approximately the same population. These proposals must be submitted to the State Board for approval.

DISCUSSION:

The Department of Education reviewed a proposal from Council School District No. 13. The review included insuring population equalization based on the numbers submitted and correcting legal descriptions and maps as needed.

RECOMMENDATION:

It is recommended the State Board of Education approve the proposal.

BOARD ACTION:

It was car	ried to	approve/dis	approve/t	able the pro	posal from	Council S	chool
District	to	redefine	their	trustee	zones.	Moved	by
, seconded by							_, and
carried.							

E. SUBJECT:

Professional Standards Commission Reappointments and Appointments

BACKGROUND:

Idaho Code Section 33-1252 requires that "... three (3) nominees for each position on the *(Professional Standards)* Commission shall be submitted to the state superintendent of public instruction, for the consideration of the State Board of Education ..."

DISCUSSION:

Idaho Code 33-1252 provides a specific breakdown of the membership required on the Professional Standards Commission. The nominations are submitted for appointment/reappointment consideration by the State Board of Education to fill the eight (8) terms that will become vacant June 30, 2003, or have become vacant recently because of resignations.

RECOMMENDATION:

The State Department of Education recommends the following nominations for appointment/reappointment consideration to fill the eight (8) terms that will become vacant June 30, 2003, or have become vacant recently because of resignations.

<u>Elementary Classroom Teacher</u> (submitted by the Idaho Education Association)

Caroline Means Bitterwolf, Moscow School District #281 (reappointment)

<u>School Trustee</u> (submitted by the Idaho School Boards Association) Edith M. Brooks, Coeur d'Alene School District #271 (reappointment)

<u>Division of Professional-Technical Education Staff</u> (submitted by the Idaho Division of Professional-Technical Education)

George David Dean, Idaho Division of Professional-Technical Education (reappointment)

<u>Secondary Classroom Teacher</u> (submitted by the Idaho Education Association)

Sue Skeen, Oneida County School District #351 (appointment)

<u>Higher Education College of Letters and Sciences</u> (submitted by Idaho State University)

James R. (Dick) Pratt, College of Arts and Sciences (appointment)

<u>Elementary School Principal</u> (submitted by the Idaho Association of Elementary Principals)

Loretta M. Stowers, Genesee Joint School District #282 (appointment)

<u>State Department of Education Staff</u> (submitted by the Idaho Department of Education)

Robert C. West, Idaho Department of Education (reappointment)

<u>Special Education Administrator</u> (submitted by the Idaho Association of Special Education Administrators)

Elaine Keogh, Nampa School District #131 (appointment to complete the term of resigned Commission member)

BOARD ACTION:

It was carried to appro	ve/disapprove/table the request be	y/fo	or Profession	onal
Standards Commission	reappointments and appointme	ents	as submit	ted.
Moved by		,	seconded	by
	and carried.			

ATTACHMENTS:

- 1. Resume for Caroline Means Bitterwolf
- 2. Resume for Edith M. Brooks
- 3. Resume for George David Dean
- 4. Resume for Sue Skeen
- 5. Resume for James R. (Dick) Pratt
- 6. Resume for Loretta M. Stowers
- 7. Resume for Robert C. West
- 8. Resume for Elaine Keogh

F. SUBJECT:

Superintendent's Report